BENGAL SECRETARIAT LIBRARY

Area and Yield

of

CERTAIN CROPS

SUMMARY of the CONDITIONS of the SEASON from 1891-92 to 1902-03

RICE

1891-92

In Bengal the rainfall was unusually deficient in the period from July to October, and widespread injury was done to the winter crop. Deficient rain during the early part of the season also affected the autumn crop.

In Madras too the season was adverse, the rain failing over large areas.

In Burma conditions were satisfactory.

1892-93

In Bengal the autumn rainfall was general and favourable, inducing extended cultivation.

In Madras also the season was favourable and the condition of the crop good until November when the rains failed in places.

In Burma conditions were good everywhere.

1893-94

Throughout Bengal there was abnormally heavy rain, with destructive floods in east Bengal and parts of north Bihar; but on the whole the season was very favourable for winter and not unfavourable for autumn rice.

In Madras the season was generally favourable for sowings, and though the rains of the autumn and winter injured the crop in some places, the yield was three-fourths of a full average.

In Burma the season was favourable.

1894-95

Over the greater part of Bengal the late rains were favourable to winter rice which gave a better crop than had been known for some years. For the autumn rice the season was in the main favourable.

In Madres the south-west monsoon was late and the rainfall generally partial and insufficient, but in the Northern, Central, and Deccan districts, and in Tanjore and Trichinopoly, the crop was on the whole good. Elsewhere the unfavourable character of the north-east monsoon affected the crop.

In Burma the crop suffered somewhat from insufficient rain.

1895-96

The season in Bengal up to September was on the whole favourable, though rain was deficient in some districts. The deficiency was marked in September and October over large areas, and there was practically no rain in November.

In Madras the crop generally was fair, though in some places, in consequence of the failure of the early rains, the yield was small. The crop was also affected in Godavari and Kistna by floods.

In Burma the late rains were unequally distributed, but the yield, owing to the larger area sown, was satisfactory.

1896-97

In Bengal the season was very unfavourable, the early withdrawal of the monsoon seriously affecting the crop. A little good was done by rain in February, but there was an extensive failure of the crop, with famine, over large areas, especially in Bihar.

In Madras the crop was generally reported to vary from fair to good, except in Ganjam and Vizagapatam where large areas completely failed, and in the Deccan districts where there was only a half crop. In these tracts famine prevailed. Conditions were better in the southern districts.

In Burma the season was favourable and the crop excellent.

214

RICE

1897-98

In Bengal the anxiety of the people to augment their reduced stocks of food induced them to substitute autumn rice over extensive areas for non-edible crops; and a good season for this crop was followed by a still better one for the great winter rice crop.

In Madras an extended area was sown, the increase being attributed to the heavy rainfall of the south-west monsoon. The conditions were on the whole sufficiently good, though qualified by the failure of the north-east monsoon, to produce a fair yield.

In Burma the conditions of the season were uniformly favourable.

1898-99

In Bengal the season was in the main favourable, and an extended area was placed under both autumn and winter rice. Though injury was done by floods in September in north Bihar it was confined to comparatively small areas, and the heavy rain benefited the crop beyond the submerged tracts and on high lands.

In Madras the rainfall was deficient in the northern districts and the Deccan, and excessive in the southern part of the Carnatic.

In Burma some injury was done to the crop by the failure of the rains towards the end of the season.

1899-1900

In Bengal the season was generally unfavourable to the autumn rice, the rainfall being excessive in June, July, and August, and below the average in the following months. In some districts also the autumn rice was injured by insects. The season was not, however, so unfavourable for the winter rice crop, which is far more important than the other.

In Madras heavy rain in September and October enabled the cultivators to plant rice freely, but the season did not continue to be favourable for a good yield, especially in the Deccan, Carnatic, and southern districts.

In Burma the season was good and the crop large.

1900-01

In Bengal the season was on the whole not favourable for autumn rice, the rainfall being on the whole deficient and capriciously distributed. For the winter rice also the season was not favourable, and the absence of rain at the time for sowing and transplanting led to a decline in the area sown.

In Madras the season was not unfavourable and the crop was generally satisfactory.

In Burma the crop was grown in normal conditions.

1901-02

In Bengal the season was not entirely favourable for the autumn rice. From April to August the rainfall was unevenly distributed, and in July it was deficient almost everywhere. General and copious rain fell in September, but in October the rains ceased abruptly. For the winter rice the season was more unfavourable. The abrupt termination of the monsoon in September, for there was very little general rain in October, did great injury to the crop, and in all the Bihar districts, where the rainfall in June was also very deficient, it was a failure. The weather was seasonable during transplantation which led to an increase in the area sown.

In Madras the season was not so favourable for early planting as in 1900, but owing to good supplies of water from the irrigation works and generally good rain in August and September an area about equal to the average yielded a crop rather more than the average of recent years.

In Burma conditions were favourable. Rain fell at the end of the first week in February, but the crop, which was greatly in excess of the average, was but very slightly injured.

1902-03

In Bengal the season was not quite favourable for the autumn rice. The rainfall in March and April exceeded the normal almost throughout the province, and in May also there was fair rain everywhere, except in a few districts of Bihar and Chota Nagpur. The monsoon broke late in June, and the fall was seriously in defect in the Patna and Chota Nagpur Divisions; while, on the other hand, in north and east Bengal, it was excessive, thus aggravating the injury caused by the abnormally heavy ante-monsoon showers. July was a seasonable month, but in August the fall was again deficient, except in north and east Bengal, while floods at the end of the month caused much damage in Muzaffarpur and Darbhanga. In the following month, however, there was copious and general rain in Bihar and Chota Nagpur, and in north Bengal the fall was greatly above the normal, while elsewhere it was slightly in defect. October was abnormally dry almost everywhere and November was literally rainless. For the winter rice the season, though capricious, was not unfavourable. The weather was seasonable during transplantation. And had it not been for the deficiency of the October rains, the crop would have been much above the average.

In Madras, there was an increase in the area sown chiefly in Cuddapah, Chingleput, and North Arcot, owing to the favourable character of the season. The condition of the crop was generally good.

In Burma floods caused damage in Tharawady and Thongwa, and a decrease in cultivation in Henzada. In Myaungmya the fallow area was large owing to cattle disease and sickness among the cultivators, and in Prome owing to untimely rainfall; otherwise prospects were bright. RICE

WHEAT

1891-92

In the Panjab the rainfall in September and October was generally very favourable, but the subsequent break and the failure of the winter rains interfered with the full growth of the plant on unirrigated land. Abnormally hot weather in March, as well as cold winds and frosts in February, injured the crop.

In the United Provinces of Agra and Oudh heavy rain fell in August and September and greatly interfered with the preparation of the soil, but the moisture helped successful germination. The winter rains were delayed, but rain in February benefited the crop. Hot winds in March and April damaged the grain, especially in the western districts.

In Bengal conditions were generally unfavourable. Abnormally dry weather from October materially interfered with sowing operations and affected germination and growth, and the crop was injured by early west winds in some parts of Bihar and north and east Bengal.

In the Central Provinces the season was abnormally dry, no rain falling from October to January. The area sown was therefore restricted and the grain dried prematurely.

In Bombay the rainfall was good in Gujarat and Khandesh, but deficient in the Deccan and Karnátak The crop suffered from adverse winds and absence of moisture in Khandesh, while elsewhere in the Deccan both unirrigated and irrigated crops suffered from the absence of the late rains. In Sind conditions were less unfavourable, but frost and westerly winds affected the crop in places.

In Berar the monsoon was characterised by excessive rain at sowing time, and the season was unfavourable, the north-east monsoon ceasing too early. The crop suffered from lack of moisture.

1892-93

In the Panjab the season was favourable, and continued rains in the winter months encouraged extensive sowings and improved prospects.

In the United Provinces of Agra and Oudh the monsoon rain, scanty in the beginning, was excessive and continuous in August and September, but fine weather then supervened and was favourable to germination. The winter rains benefited the crop, especially on unirrigated land.

In Bengal the season was unfavourable owing to deficient rain at sowing time, but the winter rains were beneficial except in north Bihar, though excessive rain in February and March injured the crop.

In the Central Provinces rain in October was favourable on the whole, though excessive in Nagpur. The crop was greatly injured by rust.

In Bombay the late rain was sufficient in Gujarat, conditions were favourable to extended cultivation in the Deccan and the Karnátak, and seasonable rain and sufficient inundation encouraged sowings in Sind.

In Berar the season was favourable. The monsoon arrived late and this fact encouraged sowings of wheat, though excessive rain in October interrupted sowings in places. The crop suffered from blight in January and from stormy weather in March.

1893-94

In the Panjab the season was very favourable. The winter rains were copious and most seasonable, though the crop was injured by rust in places, especially on low-lying lands.

In the United Provinces of Agra and Oudh the monsoon set in unusually early and rain was excessive and continuous from July to October. Dry weather continued to the end of December, and rain in January and February was generally beneficial, but the crop was greatly injured by high winds and rust.

In Bengal also the early rains were excessive, but prolonged drought afterwards, and the absence of the winter rains until February, seriously affected the crop. Prospects were further impaired by wet and cloudy weather late in the season.

In the Central Provinces sowings in Nagpur were greatly restricted in consequence of the losses from rust in 1892-93.

In Bombay the monsoon rainfall was excessive for *kharif* sowings and the area left unsown was utilised for wheat in the eastern Deccan. Sufficient late rain encouraged sowings in the Karnátak, but elsewhere wheat was replaced by cotton and oilseeds. In Sind the absence of rain and consequent insufficient inundation restricted sowings.

In Berar the season was good, though it varied considerably in different districts, the rainfall in some being excessive.

WHEAT

1894-95

In the Panjab the monsoon rain was excessive and floods ensued in the central districts, but the monsoon ceased early, and the winter rain was sufficient. The harvest was excellent.

In the United Provinces of Agra and Oudh the continuance of excessively heavy rain, especially in the central and eastern districts, caused a slight contraction in the area sown. Wet and cloudy weather and strong winds considerably affected the crop and shrivelled the grain.

In Bengal, in consequence of the late arrival of the monsoon rain, the area sown was restricted, and the crop was seriously affected by prolonged drought from November to the middle of January.

In the Central Provinces the area was greatly contracted, the crop suffered severely from heavy rain at the time of sowing, and excessive moisture favoured the spread of fungoid disease in many districts.

In Bombay and Sind the season was on the whole favourable, and the yield satisfactory, although the crop suffered from cloudy weather, rust, and frost.

In Berar, owing to heavy rain at the time of sowing, the season was not so favourable, and rust was common.

In the Nizam's Territory heavy rain late in the season reduced the yield.

1895-96

In the Panjab the monsoon rains were scanty and ceased early, the winter rains were a failure, and disaster was averted only by a general fall in the end of January and the beginning of February. At sowing time no useful rain fell in any district, and the area sown was greatly restricted in unirrigated tracts dependent entirely on the rainfall; in irrigated tracts, however, there was a considerable increase. The season continued very unfavourable for land dependent on rain.

In the United Provinces of Agra and Oudh the character of the season was almost exactly like that in the Panjab, but the rain of January and February did not extend beyond Meerut and Rohilkhand and part of Agra; nor was it sufficient where it fell to remove the effect of the prolonged drought over any great area.

In Bengal also the autumn rains ceased early and the winter rains failed.

In the Central Provinces and Berar the monsoon rains came to an early and abrupt termination as elsewhere. The conditions were unfavourable at sowing time and became worse later, with the result that a deficent crop was taken from a contracted area.

In Bombay and Sind the season was on the whole unfavourable, owing generally to the causes which affected the other provinces. The area and yield were both very unsatisfactory, the yield in most places being only sufficient for local consumption.

1896-97

In the Panjab the monsoon rains were deficient, and sowings were restricted on unirrigated and stimulated on irrigated land. Fairly good and timely rain in November, December, and January permitted of late sowing; and copious and well distributed rain in February, March, and April, which in an ordinary year would have been injurious, was beneficial to the crop.

In the United Provinces of Agra and Oudh the autumn rain was very irregular and scanty, and greatly interfered with the preparation of the land. The winter rains were generally timely and well distributed, and improved prospects; but towards the end of February strong warm west winds did considerable damage. The area sown was much less than the average, but where irrigated in time the crop was good.

In Bengal the season was very unfavourable until the end of November. Rain in December, January, and February improved the crop, but some injury was done to wheat lying on the threshing-floors by rain in March.

In the Central Provinces the winter rains were favourable except in four or five districts.

In Bombay, owing chiefly to the general failure of the late rains, sowings were greatly restricted.

In Berar there was practically no rain at sowing time. Large tracts reserved for wheat remained unsown, much of the grain that was sown failed to germinate, the area reported under wheat was hardly more than half that in 1895-96, and the crop was almost a general failure.

In Rajputana the area sown was reduced, partly by reason of deficient rainfall at sowing time and partly through the substitution of linseed and gram for wheat in consequence of successive bad harvests of wheat.

In the Nizam's Territory the season was almost equally unfavourable.

1897-98

In the Panjab the late autumn rains were sufficient and well distributed. Rain in December benefited the standing crops and encouraged further sowings, and abundant rain in February after a prolonged drought was particularly beneficial. Subsequent conditions were favourable for harvesting operations, but storms in the second-half of May damaged the grain on the threshing-floors.

In the United Provinces of Agra and Oudh the season was very favourable for sowing. Rain was general and well distributed except from November to January when irrigation was freely resorted to. The prolonged dry weather, and the strong wind which followed, affected the crop on unirrigated land, but it was considerably benefited by rain in February.

In Bengal the season was favourable; the autumn rain was copious and well distributed and the crop germinated satisfactorily.

In the Central Provinces conditions were not as favourable as could have been desired, the autumn rain being insufficient for sowings. The crop suffered from insufficient moisture, but rain in February was beneficial to the late sown crop.

In Bombay the season was on the whole unfavourable, continuous and excessive rain at sowing time preventing full sowings in some places.

In Berar, too, the season was unfavourable, and the exhaustion of food-stocks during the famine induced sowings of jawar over much of the area usually reserved for wheat. No rain fell after the wheat was sown, but the unusually cold winter months and heavy dews benefited the crop.

In the Nizam's Territory the seasonal conditions were not so unfavourable as in the preceding year.

1898-99

In the Panjab conditions were on the whole not favourable. Deficient rain in August retarded sowings, there was but little rain in the succeeding months except in September, and the injury thus caused on lands not under irrigation was increased by a cold wave in January, and by rust and insects. Finally storms and high winds in May damaged the grain on the threshing-floors.

In the United Provinces of Agra and Oudh the season was on the whole very favourable. The monsoon was late and the rain irregular and unevenly distributed, but it gave abundant showers and sufficient moisture at sowing time. The winter rains were timely and sufficient.

In Bengal the season was uniformly favourable: the monsoon rain was heavy, and the early subsidence of the floods left a deposit of silt which was useful to cultivation. The winter rain also was of great benefit.

In the Central Provinces the seasonal conditions were not good. The heavy autumn rain interfered with the preparation of the soil, and the sudden cessation of the monsoon in the second-half of September retarded sowings and produced defective germination. No rain fell until February when it could not be expected to benefit a crop which had withered for want of moisture. Injury by hail and frost was also reported from some of the northern districts.

In Bombay the season was not on the whole favourable. The seasonable and sufficient rain which fell when the seed was being sown was interrupted later, and sowings were delayed, and it was not until September that rain fell again in quantity and improved prospects. The winter rains were also of benefit. On irrigated land conditions were fairly good. In Sind the season was decidedly bad, and sowings were restricted owing to insufficient innundation and scanty rainfall.

In Berar the season was not unfavourable at sowing time, but the sudden cessation of the monsoon towards the end of September and the failure of the winter rains left insufficient moisture for the full development of the plants, and the grain was ill-matured and small.

In the Nizam's Territory the rains which followed sowings were generally favourable, but when the plants were arriving at maturity rats infested the fields.

1899-1900

In the Panjab the monsoon rain to the end of September was partial and scanty, and in October, November, and December there was hardly any rain. About the third week of January, however, there was a general fall, and further rain in February, followed by showers in March and April, helped greatly in bringing the crop to maturity.

In the United Provinces of Agra and Oudh the conditions of the season approximated closely to those described as prevailing in the Panjab, and the wheat crop did very well.

In Bengal the want of rain at sowing time was felt in some districts, leading to a contraction in the area sown. On the whole, the season was not favourable to wheat: the rainfall was irregular and badly distributed, and in some districts the crop suffered also from hailstorms.

In the Central Provinces the monsoon began well, but its abrupt cessation at the close of September impeded successful sowings. The October rain, which determines the successful germination of the wheat crop, was entirely absent. There was none in November and December, and the few showers which fell at the close of January were too late to do any appreciable good. The soil was dry, the heat abnormal, and the usual dews did not fall.

In Bombay the season was so bad that in many places no sowings could be made. In September the rain was deficient, and it failed altogether in November and December. Of the total area sown in the British districts of the Presidency proper, about 55 per cent was reported to have failed altogether to produce any crop; most of the crop which was obtained was brought to maturity under irrigation, but even that crop was poor in consequence of the failure of water in wells and canals.

In Berar the season was disastrously bad. Even the best black soils failed to retain enough moisture for the successful growth of wheat, and in five out of the six districts sowings were not attempted on unirrigated land. Practically whatever was grown was irrigated from wells, and in many places the wells failed. The crop was an almost absolute failure.

In the Nizam's Territory the conditions and results were similar to those in Berar.

WHEAT

1900-01

In the Panjab, after the heavy rains in August and September, large sowings were made on unirrigated lands, and the winter rains from December to March were so opportune throughout the province that in some districts the crops on wet lands were grown without the aid of irrigation. The crop was attacked in some districts by rust, favoured by the cloudy weather of February and March, and it had to contend in places with strong dry winds, hail, floods, excessive rain, and water-logging, as also, when the damage was caused on the threshing-floors, with untimely rain and storms. The yield was therefore smaller than might have been expected from the large area sown.

In the United Provinces of Agra and Oudh, the autumn rains were so distributed as to permit of the adequate preparation of the fields for sowing. There was abundant moisture in the soil, and the crop was sown in good time. Until the close of January the prospects were very bright and a full normal yield was expected; but the prolongation of the winter rains with cloudy weather into February induced rust in almost every district.

In Bengal the continuance of the winter rains into February caused serious injury to the crop which was then ripe, and in Bihar, which had promised well, there was but a poor yield.

In the Central Provinces continuous rain in August and September interfered with the preparation of land, and the absence of the usual October showers was unfavourable to sowings in some districts. Germination was generally good, and, except in Nagpur, prospects were favourable until the continued cloudy weather and rain in January and February induced rust which caused serious injury.

In Bombay the rainfall in September and October was deficient in most places, and the land did not retain sufficient moisture to allow full sowings. Practically no rain fell in November and December, and the young crop withered. Irrigated crops fared better for a time, but they also suffered from scantiness of well water, while in places in Gujarát rust, insects, and cloudy weather did harm. In the Deccan and Karnátak the crop on unirrigated lands failed almost entirely, and the yield generally was unsatisfactory. In Sind alone was the season generally good.

In Berar the monsoon rainfall was in excess of the normal, but the rains ceased suddenly at the end of September, and the land, which had become thoroughly parched during the famine year, did not retain sufficient moisture for the successful growth of wheat. No winter rain fell until the crop had come into ear, and it was then too late to be of much benefit.

In the Nizam's Territory sowings were not conducted in favourable conditions, the rain holding off, but some little compensation was obtained from the winter rains.

In Rajputana and Central India both area and yield were much below the average.

1901-02

In the Panjab the monsoon rainfall was less plentiful than usual and ceased early; the winter rains failed entirely. There were no late sowings, and the whole crop went practically without rain until the latter half of March when slight showers saved the withering crop from total destruction in some places. High winds and severe frost in February also proved detrimental to the standing crop, and the yield was decidedly below the average, even on irrigated lands. On unirrigated lands the failure was far more extensive. On lands irrigated by wells a considerable part of the crop was in some places used as fodder for cattle employed to work the wells. Some injury was done in places by hailstorms and by rust.

In the North-West Frontier Province the season throughout was one of unusual drought. From October to the end of February no rain fell and sowings on unirrigated lands were much reduced; the crop, where sown, in most cases withered away in March. A normal area was sown on irrigated lands which account for one-third of the crop of the season.

In the United Provinces of Agra and Oudh the monsoon of 1901 was abnormally delayed, and general rain did not set in until the 10th of July. The fall in July and August was well distributed and sufficient; but in the next two months it was deficient in the Meerut division and in parts of Agra and Rohilkhand where sowings in most places were effected with the aid of irrigation. November and the first three weeks of December were entirely rainless, and irrigation was resorted to wherever possible. The season was unusually dry and the unirrigated crop suffered generally from drought.

In Bengal the rainfall in Bihar was deficient in September and seriously in defect in October, and there was practically no rain until March, when it was too late to benefit the crop. There was a contraction in the area sown owing to drought at the sowing season in Bihar where the yield was much below the normal.

In the Central Provinces the season was abnormally dry, the October rain, on which the germination of wheat largely depends, being represented by only a few local showers, and there was no rain thereafter except in the first half of January in some places. Frost, rats, and insects also injured the crop.

In Bombay there was a contraction in the area sown owing to the deficiency of late rain. In Gujarat and north Deccan, the September rain was very deficient and sowings made little progress until after the October rains. No rain fell in November and December, and the crop suffered considerably not only from want of surface moisture, but also from the scanty supply in the wells. The surviving crop was further almost destroyed by a very severe plague of rats. In the south Deccan and the Karnátak, the September rain was generally sufficient, but that in October was below the average and checked full sowings. Later rains were light and partial and the crop withered in many places, particularly in the eastern tracts where no

rain fell and no irrigation was possible. Damage by insects and disease was also reported from a few places. The Sind crop was fairly good.

In Berar the monsoon rainfall was in excess of the normal, and although there were no winter rains, the moisture in the soil at sowing time was sufficient to promote the growth of the young plants and to bring the wheat satisfactorily into ear. At this stage, however, rats appeared in large numbers and did considerable injury, destroying in some localities almost the whole crop of the field in a single night.

In the Nizam's Territory conditions were at first somewhat favourable, but rats did considerable injury in places and over a large area; the late rains were also not favourable.

In Rajputana both area and yield were much below the average. In Central India the area and yield were larger than the quinquennial average, but a little short of the decennial average.

1902-03

In the Panjab the monsoon rains of 1902 continued late into September; and light but fairly general showers continued up to the third week in October. These conditions were favourable for early sowings on irrigated lands, and a considerable area was sown, but in the Mooltan division canal water and rainfall were insufficient and consequently sowings contracted considerably. The feature of the year was the practical absence of rain until the fourth week of January. This rendered late sowings on dry lands impossible, and caused much injury to crops on such lands. In the submontane and central districts good rain fell in the fourth week of January, which considerably improved prospects. Only a few showers, however, fell in Hissar and Rohtak. February was practically rainless, and a very anxious period ensued until the advent of copious, frequent, and general rain in March. The districts of Delhi, Karnal, Hissar, Rohtak, and Gurgaon, however, fared very badly, none of them receiving as much as ¼ of an inch. Good showers continued well into April, which would have caused much damage to the crops, but in 1902-03 it was beneficial as the crop was very backward. On the whole the conditions were favourable at the beginning and end of the season, but the prolonged drought in the middle of the season caused considerable injury to the crops on dry lands. The decrease as against the preceding year was in the irrigated area. The unirrigated crop showed an increase in area due to favourable conditions at sowing time. In the districts of Hissar, Rohtak, and Gurgaon, a large proportion of the unirrigated crop failed to mature, and the outturn was poor. Elsewhere, on irrigated lands, the crops were normal, and on unirrigated lands, just a little below normal.

In the North-West Frontier Province, owing to the favourable and timely rain in August, September, and October, large sowings were made on unirrigated lands. But the crop was in a precarious state owing to the total failure of rain for three months, from the end of October to the end of January. A timely fall in the last week of January, however, saved the situation for the time being. But February was again absolutely rainless and the prospects of the crop became very dismal. Rain fortunately again set in early in March and up to harvest time was almost overabundant. On the whole the season was a favourable one. The yield was much above average. The crop came to maturity in a good healthy condition, but the quality of the grain was damaged to some extent when it was lying on the threshing-floor by the heavy rains of April and May.

In the United Provinces of Agra and Outh the autumn rains of 1902 set in rather late in the first week of July and continued till the close of the month. In the first and last weeks of August rain was fairly general, but in the second and third weeks there was a break over a larger part of the province. The rainfall of September was almost uniformly excellent. Light rain was also received in October in most districts. Little interference was thus caused with the preparation of fields for *rabi* sowings; moisture in the soil was sufficient; and the seed germinated freely. After this the season was unusually dry and irrigation was resorted to on a large scale. The months of November and December were entirely rainless and were followed by severe frost. The rain which fell in the last week of January was pretty general and greatly benefited the unirrigated crop. February and March were also practically rainless and the crop was gathered without any mishap. The season was unusually dry, and irrigation was resorted to from all available sources. The crop, however, continued very promising, except in the western divisions, where whiteants, frost and dry west winds caused some damage. In the Benares and Gorakhpur divisions and in Oudh the crop was very good—a full normal crop. Elsewhere it was less satisfactory. But the total estimated yield was the highest on record.

In Bengal the rainfall in September was general and plentiful, but it was seriously deficient in October, there being practically no rain in south Bihar and Chota Nagpur. The fall in the subsequent months was markedly deficient in Bihar, and in a lesser degree elsewhere. On the whole the season was unfavourable to the wheat crop.

In the Central Provinces the monsoon rainfall was favourable for the preparation of land, but there was a marked difference in the conditions at sowing time between the north and the south of the province. In the south the monsoon ceased extraordinarily early in September, and consequently the area sown was contracted, whilst the early growth of the plants was stunted. Prospects were gloomy, but were much improved by some good cold weather showers. In the north the season was throughout favourable owing to the late monsoon rainfall and an exceptionally heavy fall at the end of October. Consequently the area sown showed a substantial increase. The cold weather showers were also exceptionally good, being heavy enough to benefit the growing plants and yet not so heavy as to cause any material damage from rust. Since then conditions continued to be favourable, but frost did

WHEAT

some damage in the northern and plateau districts, whilst the drought continued in most of the southern districts. In the northern districts the crop was the best reaped during the past 10 years, and, but for some damage by frost and insects, would have been a heavy bumper crop.

In Bombay the season was very good in Gujarat; in the Deccan and Karnátak the crop was somewhat damaged by heavy rain in December, and in Sind it suffered from a poor inundation. For the province generally the season was above the average. The monsoon was late, beginning in the second week of July. Some of the early crops were lost and had to be resown. August rain was sufficient and September rain was very good. The October rain was below the average, but in November heavy wide-spread rain, which did some damage to the ripe *kharif* crops, was of great benefit to the young *rabi* crops. An unusually heavy fall in December injured in places the wheat and other *rabi* crops.

In Berar the area was contracted owing to the repeated failure of the late rains during the past few years which made cultivators fear to reserve much land for winter sowings. The rainfall during the year was up to the average, and the most marked feature of the season was the exceptionally good showers in November and December which greatly benefited the growth of the plants, and raised the yield considerably above that of the previous year, and more than equalled the average of the last five years.

In the Nizam's Territory the area was contracted, but the outturn was satisfactory.

In Rajputana there was a substantial increase in both area and yield. In Central India the area did not reach the figures of last year which showed a large increase over those of the year previous and the quinquennial average, but the yield was as good or better.

In Mysore both area and yield were substantially larger than t hose of the preceding year and the quinquennial and decennial averages.

COTTON

1891-92

In the Panjab the season was very unfavourable. The winter rains, which had been beneficial, were followed by a long drought, and the monsoon held off until the end of July when rain was excessive. These conditions, and locusts, caused injury to both the early sowings and the late crop.

In the United Provinces of Agra and Oudh the weather conditions were the same as in the Panjab, with a worse result.

In the Central Provinces the season was also unfavourable; the monsoon broke exceedingly late, and then rain was heavy and continuous, injuring the crop on low land.

In Bombay the season was bad, rain was excessive in Gujarat, and late and deficient in the south Deccan and Karnátak. In Sind the overflow of the Indus was also late and irregular.

In Madras the rains failed almost entirely during the sowing season. In the southern districts extended sowings were made of the late crop, but excessive rain later in the season injured it.

1892-93

In the Panjab the rains were again late and sowings were greatly restricted on unirrigated lands in the east and north-east of the province. An inadequate inundation had a similar effect on irrigated land in the west. The monsoon though late was copious, and floods injured the early sowings.

Similar conditions prevailed in the United Provinces of Agra and Oudh.

In the Central Provinces excessive and injurious rain fell in September and October.

In Bombay the condition of the crop in Gujarat was greatly impaired by excessive rain in September. In the Karnátak a greater extent of land than usual was placed under food-grains as a result of the scarcity of the preceding seasons, and the area under cotton was in consequence smaller than the average. In the Deccan rain was exceptionally favourable for sowing and the area was increased. In Sind sowings were restricted owing to deficient water-supply and late inundation.

In Berar the season was generally good when sowings were made, but excessive rain in September and October injured the crop.

In Madras serious injury resulted from a very deficient rainfall in the north-east monsoon.

1893-94

In the Panjab the season was favourable, though some injury was caused by heavy floods in July.

In the United Provinces of Agra and Oudh continued heavy rain from July to October, and strong winds, retarded weeding operations and greatly injured the crop.

Excessive rain restricted sowings in Bengal, while in Orissa the same result was due to insufficient rain.

In Bombay rain in November affected the crop. The late crop, owing to favourable rain at sowing, covered a large area both in the Presidency proper and in Sind, but afterwards excessive rain reduced the yield.

In the Central Provinces and Berar excessive rain in November reduced the expectations of a full to a fair crop.

In Madras the season was favourable. The late crop covered a large area, but conditions after sowing were unfavourable by reason of excessive rain and cloudy weather.

1894-95

In the Panjab the area under cotton, although, owing to rain and floods, less than originally anticipated, was extraordinarily large; the monsoon was capricious but on the whole very beneficial.

In the United Provinces, on the other hand, the area was slightly below the average and heavy rain and stormy winds in October and November reduced the yield.

In Bengal, owing to excessive rain, the area of the early crop was below the average and the crop was affected by the late rains which interfered also with the sowing of the late crop. The weather which followed, however, was on the whole favourable.

In the Central Provinces and in Berar the rains were heavy and injured the standing crop.

In Bombay the rain was excessive in Gujarat and deficient in the Deccan; clouds in the north and disease in the south caused further injury.

In Madras there was a restriction in the area sown with the early and late crops due, in the northern and Deccan districts, to the fact that lands usually sown with cotton were placed under other crops, and in the southern districts mainly to the want of timely rains.

1895-96

In the Panjab the season commenced well, but after July the rainfall was generally insufficient and untimely, with the result that on irrigated land the crop was good, but poor on land dependent entirely on rain.

In the United Provinces of Agra and Oudh the rains were generally favourable to the crop, weeding operations were properly carried out, and an excellent crop was expected; but the rainfall at the end of the season proved very scanty, and insufficient moisture arrested the development of the plant. The yield, however, was on the whole good.

In Bengal the late sowings suffered from want of rain in October at sowing time, but the crop was benefited by favourable weather later.

In the Central Provinces the deficiency of rain in the later months of the monsoon favoured the crop which was particularly good.

In Berar also the scantier rainfall was beneficial to the crop.

In Bombay the absence of seasonable rain for sowing, and a long break in the rains in August, restricted sowings of early cotton. The area sown with the late crop was also below the average owing to deficiency of seasonable rain. The season was, however, on the whole better than in the preceding year. In Sind there was a deficiency of water.

In Madras the area sown was a little larger than the average owing to the favourable character of the season, but the yield was estimated to be below the average.

1896-97

In the Panjab no rain having fallen in April, sowings were greatly contracted on unirrigated land, though extensive sowings were made on irrigated areas. But the monsoon brought little rain and it ceased early; the harvest therefore depended on irrigation which was inadequate and the crop was bad.

In the United Provinces of Agra and Oudh there was sufficient rain and the crop was in good condition until the middle of August. Thereafter drought, with dry west winds, injured the crop, especially on unirrigated lands.

In Bengal the season was unfavourable, and the crop suffered from deficient rain and the early withdrawal of the monsoon.

In the Central Provinces the rainfall in September in many districts was very light and local. October was rainless, and the plants did not bloom freely.

In Berar there was seasonable rain at sowing time, and a large area was sown, but the yield was very poor owing to the failure of the monsoon after August.

In Bombay the season was on the whole unfavourable, large tracts remaining unsown owing to drought and deficient rain in places. The drought continued more or less from the middle of August and seriously affected the crop, except in Gujarat and Sind where the season was fairly good.

In Madras also the crop suffered greatly from deficient rainfall, and in places from excessive rain.

In the Nizam's Territory a restricted area was sown, and the crop was poor.

1897-98

In the Panjab sowings were restricted owing to insufficient rain and the replacement of cotton by food-grains. The yield on the restricted area was above the average.

COTTON

In the United Provinces of Agra and Oudh the monsoon commenced late and the crop on low lands suffered from excessive rain; but on the whole the condition and quality of the crop were good.

In Bengal the season was on the whole favourable.

In the Central Provinces excessive and continuous rain in September and October injured the crop

In Berar the season though a little late was on the whole favourable.

In Bombay the yield of both early and late crops was materially smaller than the average. The prospects of the crop were good until December, when it suffered from blight and locusts in many places. In Sind also the yield was comparatively small, the conditions of the season leaving much to be desired.

In Madras the rainfall was seasonable and sufficient, and an extended area was sown in the districts growing "northern" and "western" varieties, but the lateness of the monsoon contracted the area in places where Tinnevelly and Salem cotton is grown. The crop was injured by blight or drought in some of the principal cotton-growing districts.

In the Nizam's Territory the area sown was large, but owing to an unfavourable season, the yield was bad.

1898-99

In the Panjab the rainfall at sowing time was scanty, in August it was irregular and deficient, but favourable showers in September did much to develope and mature the crop. Irrigation was also late and insufficient, and sowings on irrigated lands were in consequence greatly restricted.

In the United Provinces of Agra and Oudh the season was on the whole favourable, although there was excessive rain in parts. The dry weather in October benefited the crop.

In Bengal the season was unfavourable owing to the uneven character of the monsoon.

In the Central Provinces excessive rain at sowing time interrupted weeding operations in the northern districts, and in places insufficient rain caused defective germination. Drought followed in the autumn.

In Berar dry weather in October and the failure of the late rains had a bad effect, but the yield was good.

In Bombay the area under early cotton was increased in some places as a result of favourable rains and the rotation of crops, but that increase was almost counterbalanced by decreases in other places. The cultivation of cotton, especially in the Deccan and Karnátak, had not yet fully recovered from the check it received in 1897-98 by an unusually large sowing of food crops after the famine of 1896-97; and the late crop covered an area smaller than the average owing to unfavourable rains and to the substitution of other crops in place of cotton. The season was good until December, and though the crop afterwards suffered from cold and cloudy weather in Gujarat, adverse winds in the Karnátak, and frost in Sind, the yield was abundant.

In Madras, owing partly to the unfavourable season in the Deccan districts and partly to the low price of cotton, a reduced area was sown, and the yield was very small.

In the Nizam's Territory the monsoon was late at the commencement of the season, and though prospects were improved by rain in August and September, the yield was bad.

In Rajputana the season was on the whole unfavourable owing to insufficient rain; in Central India the crop did well.

1899-1900

In the Panjab the prospects of the crop were generally hopeful in the beginning of the season, and sufficient rain at sowing time and a good supply of canal water induced cultivators to sow an extensive area, a large proportion being on land irrigated by canals and wells. But with the holding off of rain in August and September the condition of the crop deteriorated, and the yield was poor.

In the United Provinces of Agra and Oudh excessive rain in June and July interfered with sowings and was also injurious to the young plant. Thereafter the absence of rain was even more injurious, especially in unirrigated tracts where the crop was almost entirely lost.

In Bengal, in the early part of the season the rainfall was irregularly distributed, and later it was on the whole inadequate, and the yield of the crop, both early and late, was not good.

In the Central Provinces the season was one of very exceptional drought, and the plants suffered not only from want of rain but from abnormal and scorching heat.

In Berar the season was so unfavourable as to be little short of disastrous. The rainfall was deficient at the sowing season, and the subsequent drought in July prevented later sowings. The late rains also entirely failed, and with them the crop.

In Bombay the season was extremely unfavourable to the early crop, and though it was relieved here and there by partial showers in August and September, it completely failed in most places. The late sown crop also withered in many places and where it survived gave a very poor yield. In Sind the water-supply was deficient and the yield poor.

In Madras the season was, on the whole, unfavourable and the yield very poor.

In the Nizam's Territory the monsoon, which promised to be favourable at the commencement of the season, failed in July and August. There was some rain in the beginning of September, but the continuance of the drought after the middle of September told heavily on the crop.

In Central India and Rajputana the conditions of the season resembled those of Bombay and Berar, and their effect on the cotton crop was quite as bad.

1900-01

In the Panjab the largest area yet reported was sown, about 75 per cent on irrigated land. But the crop suffered greatly in some districts from insects, and the heavy monsoon rains also retarded growth.

In the United Provinces of Agra and Oudh the monsoon commenced late, and though in June some thunderstorms gave heavy local falls in places, hot and dry weather continued until the beginning of July over the greater part of the provinces. The rain continued to be deficient and unevenly distributed until the last week of August when excellent rain was received throughout the provinces, and the fall in September was generally in excess of the average. Thereafter the weather continued generally favourable. A good yield in quantity and quality was the result.

In Bengal the rain in July was, on the whole, well distributed and fairly continuous. In August it was irregularly distributed and more or less in defect everywhere. Much more copious and general rain fell in September, but in October it was deficient in most places. The season was, on the whole, unfavourable to early cotton, though fairly favourable to the late cotton except at sowing time.

In the Central Provinces, in consequence of the relative cheapness of cotton seed, favourable conditions at sowing time, and good prices, a very extensive area was sown. The distribution of the rainfall left something to be desired. In some parts the plants were swamped by the heavy and continuous rain of August and September, especially in the richer soils and in low-lying positions. Heavy rain in September also injured the flowers and the absence of rain in October affected the crop in poor soils and high-lying fields, and owing to insufficient moisture the bolls withered before maturity.

In Berar the area under cotton was the largest known. The monsoon rainfall was better than for many years past. The early rains were somewhat deferred and sowings were later than usual, but the fall in June and July was normal; August was very wet and in September also the fall was excessive; but the rains closed abruptly at the end of that month. The cotton crop on poor soils suffered from lack of moisture, but on all rich black soils and in low-lying lands there was a heavy crop.

In Bombay early cotton in the Deccan and late cotton elsewhere, mainly in Gujarat, covered a restricted area, early rains being deficient and not allowing full sowings. The devotion of part of the usual cotton area to food-grains consequent on the scarcity of the preceding year also accounts for some of the decrease. The crop promised well at first, but afterwards it suffered from the deficiency of the late rains.

In Madras the north-east monsoon failed in some places and the area sown was also restricted by the preference given to the cultivation of food-grains. The crop was generally fair except in the Deccan districts, where *Northerns* and *Westerns* were affected by disease and want of rain.

In the Nizam's Territory with good rain at the sowing season for early cotton a large area was brought under cultivation, but late cotton did not receive sufficient rain; and in the Aurangabad division, which has the largest cotton area in the territory, the sudden cessation of the winter rains kept the crop back.

In Central India both area and yield were much in excess of the average.

In Burma heavy rains greatly injured the crop.

1901-02

In the Panjab the rainfall of May was beneficial to the crop, and the injurious effect of the long break in the rains in September and October was chiefly felt on unirrigated land. Some damage was also done by locusts, grasshoppers, and rats.

In the United Provinces of Agra and Oudh a very large area—the largest since 1894—was placed under cotton, although the rains were late, owing to the stimulus given by the high prices and the plentiful crop of the preceding year.

In Bengal the season was on the whole unfavourable by reason of deficient rain for the cotton crop, both early and late.

In the Central Provinces the germination of the crop, which was not sown under favourable conditions, was unequal, and a long break of the rains in the first half of July necessitated resowings to some extent in most of the important cotton-growing districts. Excessive rain in August did some injury which was not altogether made good by a timely break in the second half of September. Owing to the absence of rain after September, and the ravages of insects in October, the prospects of the crop materially deteriorated.

In Berar the monsoon rainfall was unusually heavy and continuous. It was not until the beginning of September that a break of any duration occurred and the crop then was suffering from excessive moisture; but three weeks of fine weather followed by timely showers brightened prospects considerably; and the clear cold weather of November and December brought the crop rapidly to maturity. Rats, however, caused much injury.

In Bombay there was some increase in the area sown with early and late cotton in the British districts of Gujarat and the Deccan, and in Baroda and other Gujarat States, owing to favourable early rains, but not enough to compensate for the large decline in Káthiáwár and Cutch and in the Karnátak districts, which resulted from the deficiency of rain at the sowing

COTTON

season. In Sind there was a small increase due to a better water-supply. In Gujarat the season began well, but the crop made little progress owing to the failure of the late rains. Afterwards locusts and rats materially injured the surviving crops.

In Madras the condition and prospects of the crop were, on the whole, fair, and unusully late rain in the Deccan districts considerably improved prospects there. On the other hand, late and subsequently very heavy rain retarded sowings in the south; both the area and the yield were, on the whole, below the average.

In the Nizam's Territory the rains were, on the whole, favourable.

In Central India and Rajputana the crop was good.

In Burma the season was not favourable owing to want of rain.

1904-05

In the Panjab, owing to deficient rainfall in February and March, unirrigated cotton sowings contracted. The deficiency of rainfall, however, stimulated cultivation with the aid of irrigation. There was therefore a considerable extension of irrigated cotton sowings. The rainfall of June was favourable for late sowings on unirrigated lands. The break in the rains towards the close of July and August marred the prospects a good deal and the flowers did not form well. September rains improved the crop very much, but the flowers that formed then were late and the cold of the last few weeks checked further development. The outturn on the whole was only average, and in some districts even below average.

In the North-West Frontier Province timely rainfall from March to June stimulated sowings and proved exceedingly beneficial to the young plants, and the seasonable rains of July, August, and September enabled further sowings to be made. The crop was fairly average.

In the United Provinces of Agra and Oudh the rains set in during the first week of July and continued with little break to its close. The falls were general and well distributed, and above the normal. In the first and last weeks of August rain was fairly general, but in the second and third weeks there was a break over a larger part of the provinces. The rainfall of September was heavy. Light rain was received in the first-half of October, but the fall was not sufficient. In the third week rain was heavier but unevenly distributed. In the last week only trifling showers were received. Owing to a succession of seasons of light rainfall which generally tends to the success of this crop, the cultivation of cotton extended. Prospects, however, deteriorated afterwards. In places the flowers fell off without bearing bolls, while in others the full development of the bolls was checked. Damage was also reported in places from high winds and insects. The irrigated early crop escaped serious injury, but the unirrigated late crop suffered severely. The fibre was reported to be of average quality.

In Bengal the rainfall in June was greatly in defect in the early cotton growing districts except the Chittagong Hill Tracts, but in July the fall was practically normal all over the province. In the following month the fall was again deficient, while in September there was heavy rain in all the districts, except the Chittagong Hill Tracts and Orissa. There was little or no rain in October, when the crop was in flower or pod, and November was literally a rainless month. Thus the season was anything but favourable to the early crop. For the late crop also the season was not favourable owing to deficient rain.

In the Central Provinces, sowings, though late, were successful over an exceptionally large area. Germination was good, the weather was favourable for weeding, and the plants thrived. Conditions then pointed to a bumper crop. Since then the season was not so favourable. In the northern districts heavy rain at the end of October and beginning of November did considerable damage just when the plants were in flower. The lighter rain at this time in the southern districts did not cause so much damage, but the plants suffered in their later stages of growth from the almost continuous drought accompanied by cloudy weather, which caused the withering of immature bolls. Damage was also caused by insects. The season did not thus fulfilled its early promise of being an exceptionally favourable one, but it was still about the average.

In Berar the area sown was the largest recorded. The exceptionally good crops of the preceding two seasons and the favourable market prices doubtless influenced the cultivators, and a further reason for the large area was the decrease of *rabi* crop cultivation owing to the failure of late rains in past years. The monsoon rains commenced unusually late and there was an extensive break in August which caused some anxiety; subsequently the rainfall was light but timely, and prospects were brilliant. Unfortunately heavy rain fell in November when the first pickings were being gathered, causing considerable damage to the ripe cotton, and in some districts knocking ripening bolls off the plants; this largely discounted the favourable estimates previously made. But, although the late rains damaged the crop that had reached maturity, a heavier yield than usual was gathered from the later pickings.

In Bombay the area contracted mainly in the British districts of Gujarat and the Deccan, where the opening rains came much later than usual. In the Gujarat States, however, there was a considerable extension in area which made up part of the deficit elsewhere. Though the crop suffered in places from excessive rain and cold at the time of the opening of the bolls, the season was distinctly favourable, and the total estimated outturn was much above that of the preceding year and the average.

In Madras an extended area was sown owing to good and timely rainfall; and the condition of the crop was reported to be generally good.

In the Nizam's Territory the area sown was the highest on record. The outturn was, however, unfavourably affected in the Mahratwara districts, where most of the cotton is grown, by cloudy weather and untimely rain that fell when the cotton capsules were growing, and in Bidar the capsules fell off in parts. COTTON

In Rajputana and Central India the area exceeded the average and the crop was excellent.

In Burma also the crop was very good.

OILSEEDS

Linseed, rape, and mustard

1891-92

In the Panjab the season was fairly good for oilseeds, and the area was the largest on record up to that year, but the yield disappointed expectation.

In the United Provinces of Agra and Oudh the season was mild and favourable to linseed, and the rapeseed was free from fungoid disease: both crops, however, suffered to some extent from the lateness of the winter rains.

In Bengal the dryness of the season affected the crops, and reduced the areas considerably in most districts.

In the Central Provinces and Berar the season was on the whole favourable. In the former linseed suffered from the failure of the winter rains; while in the latter rain at sowing time was favourable, but the late rain was scanty.

In Bombay, though a large area was sown with linseed in the north Deccan, the crop was everywhere poor owing to deficient rain, and in the Karnátak it was a complete failure from drought. The rapeseed crop in Gujarat and Sind was also injured by the dryness of the season, and the yield was very deficient.

1892-93

In the Panjab where the oilseeds mature late, the winter rains were followed by a large increase in the area sown.

In the United Provinces of Agra and Oudh the expectations of a good crop were not realised owing to frost and wet weather in January and February.

In Bengal the rain in September and October was in defect, which was partially remedied by copious rain about the end of October and in November. The winter rains from January to March were excessive and continuous, and injured the crop.

In the Central Provinces timely rain in October led to a large expansion in the area under linseed, and although injury was caused by frost, the yield was good.

In Bombay the crop suffered from excess of moisture after heavy rain in September and October. But on the whole both linseed and rapeseed did well.

In Berar heavy rain in October retarded sowings of linseed, and hail in January blighted the crop.

In Assam the season was favourable.

1893-94

In the Panjab the season, first favourable, changed for the worse when heavy rain in February and March injured the crop and generated insect pests. The crop was, however, on the whole fair.

In the United Provinces of Agra and Oudh the area sown with rape and linseed was seriously reduced by excessive rainfall, and the crop suffered from rust and insects following on continued wet in the spring.

In Bengal also sowings were impeded by excessive rain. The crop was afterwards seriously affected by the failure of the cold weather rains, and a wet March injured rape and mustard in many districts.

In the Central Provinces the crop promised well in the earlier months, but heavy rain, shortly after sowing, damaged the seedlings. Cloudy weather continued, rust set in, and much injury was done, but nevertheless the yield was much good.

In Bombay seasonable rain stimulated sowings of linseed, both area and yield being good. In Sind rapeseed suffered from insufficient water-supply, blight, and frost.

In Berar the sowing of linseed was late owing to heavy rain in October and November. The crop was much affected by untimely rain and rust.

In the Nizam's Territory excessive rain caused a contraction in places of the area sown, while in others timely rainfall promoted sowings.

In Assam the season was favourable for mustard.

OILSEEDS

1894-95

In the Panjab the area sown was contracted owing to deficient rainfall at the time of sowing; and excessive rain injured the crop in the submontane districts.

In the United Provinces of Agra and Oudh the linseed and rapeseed crops were injured by excessive moisture and by fungoid disease.

In Bengal sowings were somewhat restricted owing to the prolonged monsoon rain, and the crop was injured by the absence of rain from November until the middle of January.

In the Central Provinces untimely rain and cloudy weather throughout the winter caused damage to the crop. Insects attacked it, rust set in, and the crop was practically ruined.

In Bombay excessive moisture affected the area sown with linseed, and blight injured the crop. In Sind an extended area was sown with rapeseed owing to favourable floods; but the yield was not proportionate to the increase in the area.

In Berar the unusual prevalence of cloudy weather, and afterwards storms and winds, deteriorated the linseed crop. Rust set in, and the yield was poor.

In the Nizam's Territory the winter rains injured the crop.

The area under mustard in Assam was small and the yield inferior owing to the unfavourable character of the season.

1895-96

The season generally, in the provinces in which linseed, rapeseed, and mustard are largely grown, was marked by scanty monsoon rains, which ceased much earlier than usual, and by an almost entire failure of the winter rains. The conditions, which were very unfavourable for wheat, were less so for the oilseeds in Bengal, Bombay, Berar, and Hyderabad, but were quite bad in the Panjab, Sind, the United Provinces of Agra and Oudh, and the Central Provinces.

The yield of linseed was much below the average, though larger than that of 1894-95 when the harvest was injuriously affected by prolonged wet. The area sown was restricted in Northern India by the dryness of the soil; but this dryness led to an expansion in the sowing of linseed in Bombay and Berar, much land considered too dry for wheat having been placed under linseed.

The area under rapeseed, on the other land, was more or less contracted everywhere except in the Nizam's Territory, and the contraction was very material in the Panjab, the United Provinces of Agra and Oudh, Bombay and Sind. The harvest, however, was good on the reduced area in the United Provinces, and in Bengal it was not much below the average; so that although the yield was very poor in the Panjab, Sind, and Bombay, the general result was a good crop.

In Assam the season was somewhat more favourable than in 1894-95 in the lower districts, but in Upper Assam it suffered much from want of rain.

1896-97

The monsoon suddenly withdrew in the middle of August, and the drought which followed prevented extensive sowings. In Northern India the winter rains were timely and sufficient and of great benefit, but they, like the monsoon rains, failed in Central and Western India where the crops suffered severely.

The area sown with linseed was greatly contracted in the United Provinces of Agra and Oudh, the Central Provinces, Bombay, and Berar owing to want of moisture in the soil at sowing time. The yield was also bad especially in the Central Provinces and Berar, while in Bombay the crop almost entirely failed. In Bengal and the United Provinces of Agra and Oudh the crop was better, having been greatly benefited by the winter rains.

The area under rape and mustard was larger than in 1895-96 in the Panjab, Bombay, and Sind, but was somewhat restricted in Bengal and the United Provinces. The harvest was generally fair. The short rainfall in Assam was unfavourable for sowing mustard and the yield was affected by the absence of rain during the period of growth.

1897-98

Conditions in the Panjab, the United Provinces, and Bengal were favourable at sowing and although the area sown was restricted, except in the Panjab where the acreage under rapeseed was increased, the yield was good.

The conditions in Central and Western India were generally not favourable and the area sown was greatly contracted, and the yield deficient in proportion. The rapeseed crop, however, did better in Bombay and Sind.

The mustard crop in Bengal and Assam was reduced in consequence of retarded sowings and deficient winter rains.

1898-99

In the Panjab the season was very unfavourable for rapeseed, insufficient rain at sowing time and drought when the crop was maturing doing great damage.

In the United Provinces of Agra and Oudh excessive moisture at sowing time and the substitution of food-grains for other crops, led to a contraction in the area under linseed and rapeseed. The winter rain, however, was seasonable, and though rapeseed was injured by frost in places, both crops on the whole did fairly well.

In Bengal the conditions of the season were generally favourable, the moisture in the soil from the autumn rain, and the silt in many places from the early subsidence of the floods in September, being beneficial to the crop.

In Assam the sowing of mustard was restricted owing to the late subsidence of the floods, and the yield was very small.

In the Central Provinces the young plants on the lighter soils and on slopes withered in the drought and heat of November and December; and injury was caused by frost and cloudy weather on low-lying lands in some of the northern districts.

In Bombay sowings of linseed were restricted, owing partly to the cultivation of other crops and partly to the unfavourable character of the season. In Khandesh the rain at sowing time was seasonable and sufficient, and in Dharwar it was excessive: but elsewhere in the Deccan and the Karnátak the late rains were insufficient and the crop suffered. It was also injured in places by wind and insects. Sowings of rapeseed were restricted in Native Gujarat (except in Baroda) in consequence of insufficient rain, but in the British districts sufficient moisture in the soil and favourable winter rains stimulated larger sowings.

In Sind, as the result of a low inundation, there was a very great contraction in the area under rapeseed. The crop was also injured by frost in some places.

In Berar the monsoon was favourable and sowings were conducted under seasonable conditions; but the crop suffered from the failure of the late rains.

1899-1900

In the Panjab the early cessation of the monsoon, the dry autumn months, and the lateness and deficiency of the winter rains, had the natural result of diminished sowings and restricted yield of rapeseed. In some places no yield at all was obtained, the crop having been cut when green and eaten as a vegetable by the people or given as fodder to the cattle.

In the United Provinces of Agra and Oudh excessive rain in June and July was followed by a material deficiency in August and September, and the three following months were exceptionally dry; fortunately rain fell about the middle of January and did much good to both linseed and rapeseed.

In Bengal the season was not favourable to the cultivation of oilseeds. The rainfall in the autumn months was in defect, and the want of rain was felt in many districts at the time of sowing, while an excess in others interfered with the proper germination of the seeds. The usefulness of the rain which fell in January was qualified by the injury done in some places by hail.

In Assam the late subsidence of the floods, combined with the late cessation of the rains, interfered with timely sowings, but the yield was good owing to favourable weather after the crop was sown.

In the Central Provinces, the want of moisture in the soil at sowing time, and the absence of the winter rains, told upon linseed seriously. Germination was exceedingly defective, and the plants which came up yielded but little seed.

In Bombay linseed was a complete failure in Gujarat, no sowings being possible in consequence of the failure of the rains. In the Deccan and other parts of the Presidency, the conditions were hardly better. The rapeseed crop was also practically a complete failure, some return having been obtained only in Cutch.

In Berar also linseed was a disastrous failure. Even the best black soil failed to retain enough moisture to nourish the crop, and the plants withered before reaching maturity.

In the Nizam's Territory, which is subject to climatic conditions resembling those of Berar and Bombay, linseed, rapeseed, and mustard all did very badly.

1900-01

In the Panjab the season was most favourable for rapeseed. The monsoon rains were abundant and the winter rains fell at opportune intervals, both for sowing and maturing. The area under the seed was more than double the average, and the yield very large.

In the United Provinces of Agra and Oudh the rainfall of the monsoon was abnormally heavy towards the end of the season, and the winter rains were also excessive and prolonged. The moisture in the soil was ample at the sowing season, and consequently the area sown was extended. But though the moisture permitted of the sowing of seed in a fairly large way, the excessive and prolonged continuance of the rain and cloudy whether generated fungoid diseases, and the crop was seriously affected by them in many districts, the yield in the localities affected being hardly more than half the normal crop.

In Bengal the monsoon rains were fitful and irregular, falling in abnormal quantity towards the end of the season, while the winter rain in January and February was also much in excess of the normal. On the whole the season was unfavourable to the oilseed crops, which suffered from an excess of rain in many districts and from comparative drought in others.

In Assam the mustard crop suffered in most districts from the absence of rain during the period of growth.

In the Central Provinces the continuous rain during August and September interfered with the preparation of land, whilst the absence of the usual October showers was unfavourable to sowings in some districts. Germination was generally good, and except in Nagpur, prospects were favourable until the continued cloud and rain in January and February induced rust which caused great injury. The unfavourable conditions after January told seriously upon linseed.

In Bombay linseed is mostly grown in the Deccan and Karnátak, and in both tracts the crop suffered so greatly from the absence of moisture owing to scanty rain as to be an almost complete failure. Rapeseed did better in Gujarat, but this crop is of much more importance in Sind where the area sown was in excess of the average and a fair yield was expected.

OILSEEDS

In Berar the area sown with linseed was far below the average. After the year of famine during which both food-stocks and credit were exhausted, the general inclination of the cultivators was to obtain as early a crop as possible, and larger areas were devoted to the autumn crops, notably jawar and cotton. The monsoon rainfall was in excess of the average, but the ground had been so thoroughly parched by the failure of the rains of 1899 that the moisture was rapidly absorbed and was inadequate for the successful growth of linseed. No rain fell after sowings had been completed, the rain of January came too late to be of any material benefit, and the yield was poor

In the Nizam's Territory an extensive area, not materially smaller than the average, was placed under linseed, but the conditions of the season were unfavourable, as in Berar.

1901-02

In the Panjab the rainfall of the monsoon of 1901 ceased early and was not as abundant as usual. The winter rains failed entirely, and high winds and severe frosts in February proved detrimental to the crop, which was only saved from destruction in some places by slight showers in the second-half of March. The absence of rain throughout the season was more unfavourable for oilseeds than for wheat as the former are harvested earlier, and they did not therefore derive any benefit from the rains in the latter part of March. Owing to the absence of rain in the sowing season, a very small area was sown with oilseeds, while sources of artificial irrigation were devoted chiefly to superior crops. Rape was in some fields sown with wheat, and the contraction of wheat sowings affected this crop also. The crop on unirrigated lands gave extremely poor results generally and failed entirely in several localities. On irrigated lands also the crop was below the average.

In the North-West Frontier Province, as in the Panjab, the season was most unfavourable for rapeseed. There was a decline in the area sown owing to the failure of the winter rains and to the short supply of irrigation from canals and hill torrents.

In the United Provinces of Agra and Oudh the autumn rains in the latter half of the season were insufficient in the Meerut division, and in parts of the Agra and Rohilkhand divisions; in the rest of the provinces conditions at seed-time were less unfavourable. The winter rains were scanty, only light rain having fallen towards the close of December and the beginning of January. Linseed is generally sown after an autumn crop, and, as the soil was too dry for sowing without previous irrigation, the area sown with this seed declined largely; but the area and yield of rapeseed were larger than the average.

In Bengal the monsoon was weak, the deficiency being serious in the Bihar and Chota Nagpur divisions. On the whole, the season was unfavourable for oilseeds, especially in Bihar; and there was a decline in the area sown owing to drought in the sowing season.

In Assam the season was favourable for the mustard crop except for heavy rain at the end of November. The area sown was larger than usual, and the yield was almost equal to the average.

In the Central Provinces the absence of moisture in the soil at the sowing season and the failure of the winter rains told seriously upon the linseed crop. Germination was defective and the plants which came up yielded but little seed.

In Bombay the absence of moisture severely injured the linseed crop, and its ruin was completed by rats, which destroyed nine-tenths of the crop in Khandesh. As regards rapeseed, the conditions in Sind where the crop is mostly grown were fairly good, but in Gujarat the crop was almost a complete failure by reason of drought and the destructive activity of rats.

In Berar there was no winter rain, but the season was favourable for sowing and in most localities the seed germinated freely and prospects were good; but considerable injury was done by rats, and these prospects were not realised.

In the Nizam's Territory the area was slightly smaller than the preceding year, but a little larger than the average The yield was smaller than the average owing to the unfavourable character of the latter part of the monsoon.

1902-03

In the Panjab the late continuance of the monsoon was favourable for sowings, and an extensive area was sown; but the failure of the winter rains caused wide-spread injury, and though good rain fell from March 10th onwards, this was too late to benefit rapeseed to any considerable extent. Insects also did great harm in places. As a whole, the crop was estimated at from one-half to five-eighths of the normal on the area sown.

In the North-West Frontier Province the season was on the whole favourable for the rapeseed crop. But considerable injury was done to the crop in Hazara and Kohat by heavy rains at harvest time which blackened the stalk and damaged the seed.

In the United Provinces of Agra and Oudh the autumn rains were seasonable and there was sufficient moisture in the ground when the linseed and rapeseed crops were sown. November and December were entirely rainless and were followed by severe frost. The first winter rains fell in the last week of January and generally benefited the crops. After that there was practically no rain. A much larger area than in the preceding year was placed under both crops. As in the case of wheat the dry season was very favourable to the oilseed crops. In some districts in the west slight damage was reported from the frosts of January and later on from hot west winds.

In Bengal the monsoon rains were generally plentiful, but terminated abruptly in September. In that month there was good rain, in Bihar and Chota Nagpur; in north Bengal the fall was greatly in excess of the normal while elsewhere it was, on the whole, slightly in defect. October was unusually dry, and the following two months were marked by an almost total absence of rain. The drought continued through January in Bihar and east Bengal, while elsewhere there were seasonable showers. General but scanty rain in February slightly benefited these crops. There was, however, very little rain during the next two months, except in a few districts of east Bengal, and on the whole the season was not favourable.

In Assam, the partial loss of the rice crop caused by floods induced people to sow mustard more largely than usual. Hence there was a considerable increase in the area placed under the crop. But for want of rain during the season of growth and other unfavourable causes, the character of the crop was much below the average in many districts. The increased area sown, however, made up for the poor outturn of the crop.

In the Central Provinces the Nagpur and Chattisgarh countries are the principal linseed-growing tracts, and it is in these tracts that the conditions were most unfavourable. The early cessation of the monsoon rainfall contracted sowings; germination was defective for want of moisture, and the crop which came up suffered from the continued drought. In the northern districts, where conditions were not unfavourable at sowing time, some damage was caused by frost and insects.

In Bombay there was a decline in the area sown with linseed in the Deccan and Karnátak, which was attributed to extended cultivation under *kharif* crops as a result of the unfavourable *rabi* seasons of past years, and the crop was affected by rust and disease in places owing to excessive rain, and also from want of sufficient moisture. In Gujarat the crop was fairly good. As regards rapeseed, the crop in Gujarat suffered slightly from frost in Baroda; elsewhere it was fair. In Sind there was a decrease in area owing to low inundation; but the condition of the crop was fair.

In Berar the decrease in the area sown was attributed to the repeated failure of the late rains during past years, which induced cultivators to allot more land under monsoon (*kharif*) crops. There were good showers in November and December which improved the outturn.

In the Nizam's Territory the area under linseed was slightly smaller than last year, but a little larger than the average of the preceding five years; that under rape and mustard, a little larger than last year, and about the double of the average of the preceding five years. The yield showed a better result, being about the double of the quinquennial average in both cases.

Sesamum (*til or jinjili*)

1891-92

In the Panjab the season was decidedly unfavourable, the late arrival of the monsoon causing a reduction in the area sown. The crop was damaged by locusts, and the yield was very poor.

In the United Provinces of Agra and Oudh, the monsoon rain was quite abnormal, light in the beginning, but excessive at the latter end of the season. The area and yield were both small.

In the Central Provinces the season was unfavourable and sowings were greatly restricted. The crop was very poor.

In Bombay the rain at sowing time was favourable, but the growing crop suffered from drought as well as from excess of moisture in places. In Sind a low inundation and locusts affected both area and yield.

In Berar excessive rain and insects injured the crop, though its condition was favourable in some districts owing to sufficient and seasonable rain.

In Madras the area and yield were reduced by the unfavourable character of the season.

1892-93

In the Panjab the spring was very dry and the summer rains late, but they were heavy at the end of July, stimulating sowing. The yield was very good.

In the United Provinces of Agra and Oudh sowing was somewhat delayed by the late commencement of the monsoon, but light rain in July proved very favourable. Heavy rains in August did some injury, but the crop on the whole remained in good condition.

In the Central Provinces conditions were favourable except in tracts where excessive rain damaged the crop.

In Bombay there was timely rain, and extended sowings were made in the Deccan and Karnátak; prospects were affected by heavy rain late in the season, but the yield was better than in the preceding year. In Sind the harvest was bad.

OILSEEDS

In Berar unfavourable rain and the rotation of crops caused a decrease in the area own. The crop promised well, but excessive rain at the close of the monsoon affected the yield seriously.

In Madras, owing to exceptionally favourable rainfall in February and March, extensive sowings were made and a fair yield was expected, but drought in some places, and exceptionally heavy rain in others, injured the growing crop.

1893-94

In the Panjab, though the season had very different effects in different districts, there was a general increase in the sown area; but the yield was small.

In the United and Central Provinces the weather was suitable for sowings, and the crops promised well at first, but excessive rain in the autumn caused injury, though less in the United than in the Central Provinces.

In Bombay there was a considerable decrease in the area sown, owing to untimely rain and an extension of cotton cultivation. Rain was excessive in September, and the yield was not good. In Sind, owing to the want of rain and the early subsidence of the river, the yield was not proportionate to the extended area sown.

In Berar the early sowings were impeded by deficient, and the later sowings by excessive, rainfall; and excess of rain in September injured prospects.

Heavy rain also interfered with sowing in the northern and north-eastern parts of Madras, but elsewhere in this province the season was favourable. The late crop was well up to the average in the central districts, but in the southern districts the absence of rain in January and February restricted the area. In no part of the province was the crop good.

In the Nizam's Territory the crop was damaged by excessive rain during the harvesting season.

1894-95

In the Panjab suitable rains and previous high prices favoured extended sowings, but the premature cessation of the early rains combined with an excess in the later rains to reduce the yield.

In the United and Central Provinces the season began well, but injury was afterwards done by excessive rains, especially in the Central Provinces, where they not only damaged the crop in flower but also seriously impeded harvesting operations. In the United Provinces the loss occasioned by the rains was considerable.

In Bombay the early sowings were injured by rain, but the increased area sown later more than counterbalanced the loss. The yield was deficient owing mainly to scanty rain after sowing and to excessive rain when the crop was in flower. In Sind with favourable rain and extensive inundation the yield was fairly good.

In Berar an extension of jawar sowings and the low prices obtained for sesamum in the previous year combined to reduce the area sown. Rain did much damage to the crop in flower, and the yield was generally poor.

In Madras heavy rains interfered with sowings of the early crop, especially in the Carnatic. The early cessation of the north-east monsoon rainfall restricted the area sown with the late crop, especially in the Carnatic and the southern districts. Owing to the continuance of unfavourable conditions the yield was very poor.

1895-96

In the Panjab the rainfall was unfavourable, and the crop on the whole was poor.

In the United Provinces of Agra and Oudh the rains were timely and favourable for sowing, but they ceased in July, were moderate in August, and scanty in September and October. The crop did not develope fully, while insects and strong winds in some places did further damage. The yield did not come up to the expectations formed of it.

In the Central Provinces the season was generally favourable for sowing, and rainfall was well distributed to the end of August. This encouraged more extended sowings than usual, but the season became adverse later by reason of deficient rain and the abnormal heat which prevailed to the end of November.

In Bombay a large area was sown, the rainfall being seasonable, but the crops, both early and late, suffered from want of moisture. In Sind scanty rain and a low inundation curtailed the area, and the young crop suffered from want of moisture.

In Berar there was satisfactory rain at the time of sowing, but a long period of drought followed, and the yield was bad.

In Madras the early crop covered an area greater than the average owing to the favourable character of the early rain, and the late crop an area smaller than the average on account of the excessive sowing of the early crop. Rain was too heavy in some places while it was deficient in others, and the yield from both crops was bad.

1896-97

Everywhere except in Madras and Bombay an extended breadth of land was sown, but the early withdrawal of the monsoon after the middle of August proved as unfortunate for sesamum as for other crops.

In the Panjab the crop was very poor.

In the United Provinces of Agra and Oudh the prospect of a fair season disappeared with the withdrawal of the monsoon in August, and the crop was greatly injured, especially in unirrigated lands.

In the Central Provinces the area sown was large, but the crop generally fared bad except in Nagpur: and the yield was more or less poor, though much larger than the average owing to the increasing favour with which the cultivators regarded the crop.

In Bombay, with the exception of Gujarat and Sind, the early withdrawal of the monsoon seriously injured the crop. In Gujarat the season was favourable and this oilseed took the place of damaged cotton. In Sind the inundation was good.

In Berar also a large area was placed under the crop owing to the promise at sowing time of a good season, but the drought which supervened injured the crop greatly.

In Madras the sowings of the early crop were greatly contracted owing to the want of seasonable rainfall, while those of the late crop were extended from timely rain. The former crop suffered severely from drought, and the result was a poor yield. The latter did not suffer so much.

1897-98

The late arrival of the south-west monsoon and the desire of the people to place greater breadths of land under food crops accounted for a contraction of the area sown in most provinces.

The yield varied greatly from about an average crop in Bombay, the United Provinces, and the Panjab, to greatly below the average in Madras, Sind, and the Nizam's Territory.

In the Central Provinces and Berar the conditions were exceptionally favourable; the area sown was more than ordinarily large, and the yield was estimated at about double the average. These large yields so far balanced the less favourable results in other provinces that the aggregate yield for all the reporting provinces was well in excess of the average.

1898-99

In the Panjab the area sown was a little larger than the average, but the cessation of the rain when the crop was ripening was followed by a poor yield.

In the United Provinces of Agra and Oudh the area sown was restricted, and excessive rain towards the latter part of the season deteriorated prospects.

In the Central Provinces the season was unfavourable, owing to the uneven distribution of the rainfall. The early sown crop suffered from excessive rain, and from the sudden withdrawal of the monsoon which left insufficient moisture in the soil and interfered with the development of the plants. The germination of the late sown crop was very defective, owing chiefly to excessive rain at sowing time.

In Bombay the increase in the area sown in parts of Gujarat and north Deccan, due to favourable rains at sowing time, did not suffice to counterbalance the large decreases elsewhere, which were attributed to insufficient rain in the southern Deccan and Karnátak and to a low inundation in Sind. The season was generally favourable and the yield was large.

In Berar sowings were made under favourable seasonal conditions, and, though the crop was injured by the failure of the late rains, the yield was large.

In Madras the season was favourable for the late crop, and it grew in good conditions on an extended area. But the area under the early crop, which occupies about three times the area sown with the late crop, yielded a poor crop.

1899-1900

In the Panjab the season opened very well, but became more unfavourable as the months passed, and the yield was small.

In the United Provinces of Agra and Oudh the excessive rainfall in the beginning of the season gave rise to apprehensions regarding the prospects of the crop, and later the crop was damaged by continued drought in the Meerut, Agra, and Rohilkhand divisions, where, however, *til* is not extensively sown. In the tracts in which the cultivation of *til* is important, the moderate rainfall of August and September proved very beneficial and the yield there was good.

In Bengal on the whole the season was good enough, though the rains were irregular, excessive in some places and insufficient in others; and the yield was larger than the average.

In the Central Provinces the season favoured sowing operations, but it did not continue favourable, and the abnormal heat of November did much injury. The early crop was fairly successful, but the cold weather *til* in many places began to wither when on the point of maturity.

In Bombay the early rains were scanty and the later rains failed entirely. Owing to the extremely unfavourable nature of the season the crop withered away in many places and where it survived gave the poorest yield.

In Berar the crops withered under the drought and the excessive heat which followed.

In Madras the area sown was restricted, the south-west monsoon being unfavourable in most places, and the yield was not good.

In the Nizam's Territory the rains failed, and the crop withered under the drought which followed some good rain in September.

1900-01

In the Panjab the area sown was much below the average, heavy floods in some districts restricting sowings.

In the United Provinces of Agra and Oudh the monsoon began late and was generally scanty and unevenly distributed until the third week of August. Then and in September,

OILSEEDS

excellent rain fell, and its distribution was all that could be desired, especially in Bundelkhand, where ordinarily four-fifths of the area under sesamum is grown. Except for heavy falls in Benares and Gorakhpur in the second week of October, the weather during that month and November was clear and seasonable.

In Bengal the monsoon rainfall was capricious and irregular, and, on the whole, the season was not favourable for oilseeds, which suffered from an excess of rain in many tracts, while in others they suffered from drought.

In the Central Provinces the conditions at the time of sowing, both of the early and late varieties, were generally favourable and a large area was sown. Sesamum is a cheap crop to sow, and it resists drought better than most crops. The difficulty of obtaining the relatively expensive seed of wheat and other spring crops stimulated its cultivation. The early crop suffered somewhat from the heavy rain at the close of August and during September. The germination of the late sown crop, which is more extensively grown in the south of the provinces, also was irregular, heavy rain just after sowing having washed away part of the seed. Drought during October and November, abnormal heat, and insects, following on cloudy weather, also injured the crop. In consequence the yield was smaller than the normal.

In Bombay the conditions were good in Káthiáwár at the time of sowing, and double the average area was sown, the increase there and in Gujarat more than making up for the contraction in other parts of the Presidency caused by the preference of cultivators for the cultivation of food-grains.

In Berar the rains at sowing time and the monsoon rains were favourable; there was no prolonged break, and the crop developed well under congenial climatic conditions.

In Madras the conditions were not good, and though a large area was sown the crop was deficient.

In the Nizam's Territory a few seasonable showers in January, which were badly needed, improved prospects.

1901-02

In the Panjab (including the North-West Frontier Province) the rainfall at sowing time was unevenly distributed, being excessive in some districts and insufficient in others. The yield was below the average owing chiefly to the early cessation of the monsoon rains.

In the United Provinces of Agra and Oudh rain commenced late, about the 10th of July; the weather in August was favourable and the rainfall above the normal in most districts; a break of about three weeks ensued early in September; but at the end of the month heavy rain was received in the greater part of the province. The second and the last weeks of October were rainless, but in the first and third weeks some rain fell in parts of the dry western districts. The month of November was practically rainless. Sowings were late, the drought in September retarded growth, and deficient rain in October caused further injury.

In Bengal there was no rain in December and January, and all the *rabi* crops suffered severely in consequence. A very restricted area was sown owing to drought at sowing time.

In the Central Provinces the rainfall was very unfavourable. The early sown variety suffered, especially in the north, from excessive rain, the crop being washed out in places while weeding was retarded or altogether prevented. The conditions were still more unfavourable for the late sown crop, which is put down at the end of August or during the first week of September. Continuous rain at this time interfered with sowings and much of the seed sown was washed out by heavy showers. Germination was very defective and many fields were ploughed up and devoted to other crops. The contraction of area sown was greatest in the Nagpur country, where the crop entirely failed over large tracts. A prolonged break subsequently occurred during which the young plants that germinated languished from want of proper moisture, and some injury was also caused by insects.

In Bombay the increase in the area sown in parts of Gujarat and Karnátak, due to favourable rains for sowing, was not sufficient to counterbalance the large decrease elsewhere, resulting mainly from the scantiness of sowing rains in the Presidency proper and to a low inundation in Sind. In Gujarat the season was very unfavourable owing to the failure of the late rains, while rats and locusts did some injury in places, and in consequence the crop was estimated to give only half the average yield. In the north of the Deccan, too, the crop suffered to some extent from the same causes, while in Sind it was affected by a deficient water-supply.

In Berar the monsoon rains were heavier than usual and the crop suffered from excessive moisture; during July and August the rainfall was almost continuous, and weeding operations were rendered impossible. Rats and locusts also attacked and injured the crop.

In Madras in the Circars, the Deccan districts, and the west coast the sowings were about up to the average, but owing to the unfavourable season they were very deficient elsewhere, especially in the Carnatic.

In the Nizam's Territory the area was above but the yield below the average, the late rains having been unfavourable.

1902-03

In the Panjab there was an increase in the area sown owing to seasonable rainfall and the low floods in the riverain tracts which facilitated cultivation in lands usually inundated. The districts of Ferozepore, Montgomery, and Jhang however showed a marked falling off as compared with the past year, owing to deficient moisture at the time of sowing. The outturn was good in Gujarat, Lahore, and Ambala. Elsewhere it was only average or below average

owing to a break in the rains of July and August. The crop was also attacked by insects in Montgomery, Mooltan, and Gurdaspur.

In the North-West Frontier Province the crop was above the average both as regards area and outturn.

In the United Provinces of Agra and Oudh the rains set in rather late in the first week of July and continued till the close of the month. In the first and the last weeks of August rain was fairly general, but in the second and third weeks there was a break over a larger part of the provinces. The rainfall of September was almost uniformly excellent. Light rain was also received in October in most districts, but it was not sufficient. The month of November was entirely rainless. The season of light rainfall was in general favourable to the sesamum crop.

In Bengal the monsoon rains ceased early and the drought continued through January in Bihar and east Bengal, while outside that area there were seasonable showers in all the chief oilseeds-growing districts except Murshidabad. There was general and beneficial rain almost all over the province in February and March, but, on the whole, the season was not favourable.

In the Central Provinces the monsoon though late was favourable both for the sowing and the growth of the early variety. In almost all districts a full yield was anticipated. The late variety was sown under fairly favourable conditions and germination was good. But afterwards conditions were less favourable and there was some deterioration, so that the general outturn for the province was estimated at about an average crop.

In Bombay the monsoon broke much later than usual and did not permit full sowings of the early crop. For the late crop, however, the season was favourable and extensive sowings made up the deficit under the early crop. Though the crop suffered at first a little by a prolonged break in the middle of the season, and later on the reaped and ripe crop was somewhat damaged by excessive *swati* rain, the season on the whole was favourable. The area and outturn were both deficient in Sind.

In Berar the rains began late and sowings were undertaken later than usual, but subsequently the season was favourable. Although the rainfall in the province generally was below the average, the showers were timely, and the crop was in a thriving condition. Unfortunately when harvest operations commenced at the end of October the weather again turned wet and considerable damage was done to the crop.

In Madras owing to seasonable rainfall an extended area was sown, and the condition of the crop was generally fair.

In the Nizam's Territory the crop was unfavourably affected in places, but nevertheless the total yield was the largest recorded in the Territory.

JUTE

1891 The rainfall when sowings were being made was excessive, and the area placed under the crop was smaller than in the preceding year. Germination and growth were also affected by excessive rainfall. Later, again, the want of rain was felt in several districts.

1892 Excessive rainfall injured the plant in some districts, but on the whole the season was good, and a larger area was sown under the stimulus of high prices.

1893 The area sown was nearly equal to that of 1892, but the crop was greatly injured in most districts by heavy and continuous rain in the middle of the season.

1894 Rain was abundant and well distributed to the end of May, and the area sown was about equal to that of 1893. In June rain was deficient in several districts, though normal or in moderate excess in parts. At the end of July there was general and heavy rain throughout north Bengal, and during the first half of August the fall was favourable in every district.

1895 The rainfall was in excess of the normal quantity in April and the first-half of May, heavy in the second-half of May in east Bengal, and less than the average in other parts. In the next two months it was deficient, and in the first-half of August it continued deficient in central and western Bengal, and was excessive in north Bengal and north Bihar. The area sown was almost the same as in the preceding year; but the yield was larger.

1896 Owing to scanty rain when sowings were made the area placed under the crop was a little smaller than in 1895. In May and the early part of June excessive rain interfered with

JUTE

growth and with weeding. In July and August it was deficient, still further impairing the prospects of the crop in most districts.

1897 On the whole the season was favourable, and there was enough water for steeping.

1898 The area sown was smaller than in 1897, owing partly to the unfavourable character of the season at sowing time and partly to the low prices of jute in 1897 and to high prices of food-grains.

1899 The weather, though seasonable in the beginning, became extremely unfavourable towards the end of the season.

1900 There was some deficiency of rain in March and April, which prejudicially affected sowings in a few places. In May and the first fortnight of June, the rainfall was also light, but good rain later greatly improved the prospects of the crop. In July there was heavy rain in most districts, but a partial drought followed in August which, combined with a want of flood-water from the rivers, hampered steeping operations in north and east Bengal, and in a few cases diminished the yield. Fair rains fell in the first-half of September, but almost too late to have much effect on the yield.

1901 The rainfall in the earlier months of the year was almost uniformly unfavourable. In June there was heavy rain in almost all the important jute-growing districts; in July the rainfall was very irregular but not seriously deficient; the rainfall of August was again capricious, and was in considerable defect in some important jute-growing districts. There was heavy rain early in September, and thereafter it was fine and hot. On the whole, the weather was unfavourable up to the close of May, but it was exceptionally favourable afterwards.

1902 In Bengal the season was abnormal. A prolonged drought ended in the middle of March. In April and May the rainfall was excessive, and almost doubled the normal in the Dacca division and more than did so in Tippera. In south-eastern Bengal the weather was, therefore, very unfavourable for sowings, and to a less extent this was the case also in north-eastern Bengal. The heavy rain in May also retarded weeding. Since then the weather conditions were normal, but the prospects of the crop were not encouraging.

In Assam the weather was unfavourable at the beginning of the season, and the adverse influences persisted to the end. The crop was injured by excessive rain and flood.

INDIGO

1891-92 In Bengal the season was altogether disastrous in consequence of an unusual deficiency of rain, and although the weather was more favourable at the manufacturing season, the yield was hardly increased.

In the United Provinces of Agra and Oudh the rains commenced very late and were heavy and continuous, causing a reduction in the area sown. The excessive drought in June and July seriously tried the crop, while the continued wet weather of August prevented the proper development of dye in the leaves.

In the Panjab the late arrival of the rains, and the ravages of locusts in some places, reduced the area and the yield.

In Madras the area and yield were seriously affected by an unfavourable season.

1892-93 In Bengal the season was unfavourable at sowing time owing to deficient rain in autumn and spring; conditions improved later with favourable rain, but excessive rain and cloudy weather during manufacture again operated injuriously. In Bihar the weather was favourable throughout, although in some parts very heavy rain and floods caused injury.

In the United Provinces of Agra and Oudh the autumn rains were late, heavy, and continuous, and the plants suffered to some extent; but the yield of dye was much better than in the preceding year.

In the Panjab a protracted drought in the early summer retarded sowings, and the area sown was very much reduced.

In Madras the crop was on the whole good, and it would have been very good throughout but for the unfavourable character of the season in December.

1893-94

In Bengal the rainfall was favourable at sowing time, and a large area was sown, but heavy and incessant rain and floods caused great injury.

In the United Provinces of Agra and Oudh a favourable season and a rise in the price of indigo at Calcutta led to an increase in the area sown: the seed germinated freely, and the early commencement of the rains greatly benefited the crop.

The rainfall was favourable in the Panjab, and the state of the canals generally satisfactory, the result being a large area sown and a good yield.

In Madras larger sowings were made owing mainly to timely rains.

1894-95

In Bengal the season was on the whole somewhat late, but the weather was generally favourable. In Bihar the early part of the season was particularly good, but it was followed by a long period of drought which injured the produce in most districts in the early part of the manufacturing season.

In the United Provinces of Agra and Oudh, although the seed germinated well and timely rain benefited the crop, it suffered from deficient rain in the second-half of July and from heavy and continuous rain in August; but the average condition was not much below that of the preceding year.

In the Panjab the areasown was increased, and the crop was good.

In Madras the large area sown and the fair yield secured in the preceding year led to a further increase in cultivation; the yield was generally fair.

1895-96

In western Bengal the rainfall on the whole was deficient and untimely; in northern and eastern Bengal and in Bihar it was favourable in most places.

In the United Provinces of Agra and Oudh the crop suffered at first from want of rain in most districts, and then improved with moderate and favourable rainfall, except in the Upper Doab where it suffered from floods. On the whole, however, the condition of the crop was better than in the preceding year.

In the Panjab the crop was fair.

In Madras the season was favourable in Kistna and North Arcot where a large area was placed under indigo, but elsewhere sowings were restricted owing to the insufficient rain of the south-west monsoon. The yield generally was fair.

1896-97

In Bengal, owing to the early cessation of the monsoon of 1895 and the scanty showers in the spring of 1896, moisture was generally deficient at sowing, the deficiency continuing in most districts with the result that the yield was below the average. In Bihar the first cuttings were generally poor, but the dry weather gave an extremely and unusually good second cutting which in many places in north Bihar more than compensated for the deficient first crop.

In the United Provinces of Agra and Oudh germination was satisfactory and prospects very favourable until July, but the late rains were scanty and unevenly distributed. The crop suffered in consequence.

In the Panjab the rainfall was scanty, but the condition of the young crop was generally fair. Later in the season the continued deficiency of rain was felt severely, and the crop on unirrigated land dried up completely.

In Madras the season opened with favourable conditions, and an increased area was sown; but the rain thereafter was deficient and the yield small.

1897-98

In Bengal the area sown was small, the contraction being due to insufficient rain at sowing time. The crop suffered greatly from the absence of seasonable rain in Bihar and north Bengal and from excessive rain in south Bengal.

In the United Provinces of Agra and Oudh the season was not favourable; the growth of the plants was interfered with early in the season by excessive heat and insufficient rain, and the heavy rain of July and August flooded the low lands and greatly injured the indigo growing on them.

In the Panjab the crop is grown on irrigated lands only, and its condition was generally good.

In Madras the area sown was small, the contraction being due not so much to the deficiency of seasonable rain as to the replacement of indigo by food crops.

1898-99

In Lower Bengal the season was generally unfavourable, but it was favourable in north Bihar.

In the United Provinces of Agra and Oudh the season was not favourable. The crop started well, but a large proportion was lost through insufficient irrigation and injury by insects, and further serious injury was done by continuous heavy rain, especially in the Benares division.

In Madras and the Panjab also the season was on the whole unfavourable, but the contraction in the area sown was stated to be partly due to the low prices of 1897.

INDIGO

1899-1900

In Bengal the season in the beginning was not unfavourable, but the excessive rain which fell in June, July, and August was most injurious, and the crop was also injured in many districts by the floods which followed the excessive rain.

In the United Provinces of Agra and Oudh the crop continued in good condition until the end of June, but excessive rain fell in July and seriously injured the plant everywhere, especially in the eastern districts. The rains then fell away and drought, particularly in the Agra and Meerut divisions, added to the injury done by heavy rain.

In the Panjab the crop suffered from the absence of rain and the stoppage of canal irrigation in Multan and Dera Ghazi Khan. In some unirrigated tracts it failed entirely.

In Madras also the season was generally unfavourable and the yield deficient.

1900-01

In Bengal sowings and the early growth of the crop were retarded by the scanty rain of April and May. Fairly good rain in June and July was followed by an interruption in August, but prospects were improved in Bihar by abundant rain in September, which, however, was accompanied by floods and consequent injury to the crop in Lower Bengal. In October sufficient rain fell, and the season generally was much better than that of 1899. The area, however, was restricted, owing to the substitution of other crops for indigo in north Bihar under the discouragement of the comparatively low level of prices during the preceding three seasons. The yield on the whole was good in the districts of north Bihar, but very poor in Lower Bengal where, however, the cultivation of indigo is now greatly restricted.

In the United Provinces of Agra and Oudh, unlike Bengal, the area sown increased, the increase being ascribed to the temporarily improved prices in the previous season. It may be that that improvement was an inducement to native growers of indigo, while it did not remove the discouragement to European planters. In the early months of the season prospects were good, but heavy rain in the Doab towards the end of the season reduced the yield.

In the Panjab the rains were late at sowing time, but the crop did well later when the rain came down abundantly.

In Madras the high prices of food-grains induced cultivators to restrict their sowings of indigo. The crop sown was very fair on the whole.

1901-02

In Bengal the season was on the whole unfavourable. During the early months of the year the rainfall was in slight defect but in May there was good and generally well distributed rain. The monsoon rains broke late and were deficient in June and July. There was little rain anywhere in October, and the showery weather at the end of November did not extend to north Bihar. Besides the unfavourable character of the season, the area was affected by the fall of prices resulting from the competition of synthetic indigo.

In the United Provinces of Agra and Oudh the reduction of area was proportionately much greater than in Bengal. The prospects of the crop, which had been affected by the late arrival of the monsoon, continued to be unsatisfactory until the end of August, but fine dry weather in September favoured manufacture.

In the Panjab a restricted area was sown owing to late inundation from canals in the south-western districts and the closing of factories consequent on the fall in prices. There was an insufficiency of rain and canal irrigation after the sowings, and some injury was done by locusts.

In Madras an extended area was sown in Nellore and Kistna owing to favourable weather for sowings, but almost everywhere else the cultivation of indigo continued to decline. The low prices realised, and the high prices of food-grains, are the principal reasons assigned for the decrease, but in the Carnatic, where the decrease was marked, the season was very unfavourable.

1902-03

In Bengal the season was generally very unfavourable owing to capricious and ill-distributed rainfall, and the outturn was the worst on record. The unfavourable prospects of the industry caused by the competition of synthetic indigo also contracted the area, which had been steadily diminishing in past years.

In the United Provinces of Agra and Oudh the decline in the cultivation of indigo caused by the fall in prices was very rapid and pronounced. The late commencement of the rains stunted the growth of the plant, which was further retarded in places by the continuous rain of July. The dry weather during August was, however, favourable and the produce of dye was reported to have been satisfactory.

In the Panjab the decrease in the area under indigo was almost as great as in the United Provinces, the contraction was due largely to the small margin of profit left by the fall in prices, but partly also to the insufficiency of canal water and unfavourable weather.

In Madras also the cultivation of indigo was fast declining as the low prices realised caused preference to be given to food crops and earthnut. The crop was reported to be generally good.

SUGARCANE

1899-1900

In Bengal the season was generally favourable to the crop at the beginning, but excessive rain in some parts, in August, September, and October, adversely affected prospects, while, in a few places, the crop was injured by the absence of seasonable rainfall and by insects.

In the United Provinces of Agra and Oudh the season was favourable until the autumn rains set in; but the excessive rainfall of June and July seriously injured it, and further injury was caused by the scanty rainfall of the succeeding months. Slight injury from insects was also reported from several districts.

In the Panjab the unfavourable weather conditions affected even the crop grown on irrigated lands, and cane grown on unirrigated land was practically a failure. The crop was stunted in growth and deficient in juice, while, owing to the great scarcity of fodder, the cane was used entirely or very largely in many districts as cattle-food.

In Madras the weather in many places was unfavourable, and some of the crop suffered from want of water, especially in the Circars.

1900-01

In Bengal the rainfall to the end of July was generally in defect; in August it was badly distributed and more or less deficient; in September it was copious and general; there was very little in October, and in November and December practically none. On the whole, the monsoon conditions were not very favourable to the crop, which also, in a few districts, suffered to some extent from insect pests.

In the United Provinces of Agra and Oudh the rains of February and March favoured sowings, and the crop germinated freely. Hot winds and afterwards insufficient rain in June and July retarded growth; but the crop was generally very healthy and promising. The rainfall was moderate in August but unusually heavy in September, and accompanied by high east winds. Floods also caused some local injury on low lands. On the whole the autumn rains greatly benefited the crop. November was rainless, but December and January were exceptionally wet; and cane-pressing was delayed in places by excessive rain.

In the Panjab the area under cane was slightly reduced, owing to dry weather at sowing time in April and May and to the fact that prices of food-grains were so high that it was more profitable to grow them than sugar on some lands. In Hoshiarpur, one of the chief cane-producing districts in the province, another reason assigned for the decline was the supersession of indigenous by imported sugar. In Sialkot it was said that a great number of cultivators emigrated with their cattle to other places owing to the dearness of food and scarcity of fodder in the previous year, and as most of the cane crop was used as fodder in the preceding year, the supply of seed was small and the price high. Although there was, on the whole, a decline in the area under cultivation, both irrigated and unirrigated, the season was far more favourable than the previous year.

In Madras early rains and an adequate supply in tanks led to increased sowings. The condition and yield of the crop were generally fair.

1901-02

In Bengal, on the whole, the season was not unfavourable, but rain was very scanty in February, March, and April, and the crop suffered from locusts and insects in a few districts. In December and January again there was a complete absence of rain. The area sown was below the normal owing to the unfavourable character of the early part of the season.

In the United Provinces of Agra and Oudh the rains of January and February 1901 were ample and germination was good, and the supply of water in the hot months was generally sufficient except in a few districts. Injury to the crop in several districts resulted from various causes—hot winds, insects, and the late arrival of the monsoon; but it was serious only in the Rohilkhand division and in parts of the Meerut division where the crop was attacked by grasshoppers. The autumn rain in July, though below the normal, was well distributed, and the rain in August was favourable and prospects improved materially, though the injury caused in the tracts mentioned could not altogether be made good. A break of about three weeks ensued early in September and the crop began to suffer, but at the end of the month heavy rain was received in the greater part of the province except the Meerut division which practically got no rain, while the falls in parts of the Agra and Rohilkhand divisions were insufficient. Some rain fell in places in October, but November and the greater part of December were rainless. The season was too dry to give a full yield of juice. In the two important cane-growing divisions of Meerut and Rohilkhand the crop was unpromising from the beginning owing to the injury caused by grasshoppers, and the drought of September and October further affected growth. In the other divisions the yield was somewhat better.

In the Panjab the area under sugarcane increased in irrigated tracts, but elsewhere there was a contraction due to scanty rain in March and April. The crop suffered from insects, locusts, and rats, and seriously from drought in September and October and the severe frost that followed. The result was so bad that in parts of Gujranwala the juice was not extracted and the cane was given as fodder to the cattle. The crop on the whole was below the average and, compared with the area, the estimated yield was disproportionately small. Another reason assigned for the decline was the supersession of indigenous by foreign sugar.

SUGARCANE

In the North-West Frontier Province the crop was on the whole above the average. Though the failure of rain at the time of its maturing caused some decrease in the yield, the decline was more than compensated by the increased acreage.

In Madras, on the whole, a full normal area was planted. Rainfall was deficient in some places; but the yield was on the whole fair, though in the Circars the crop was far from good and in the Godavari delta disease caused material loss.

1902-03

In Bengal the season was not generally unfavourable though excessive rain at the time of planting caused some contraction of area, and damaged the young plants in parts of north and east Bengal; while a few districts in Bihar, on the other hand, suffered from drought.

In the United Provinces of Agra and Oudh the rains at sowing time—*i.e.*, February and March—were very deficient. Germination was, however, good except in the eastern districts, where later on drought and whiteants did further damage. The autumn rains commenced in the first week of July, and continued with little break to its close. The falls were general and well distributed and generally above the normal. In the first and last weeks of August rain was fairly general, but in the second and third weeks there was a break over the greater part of the provinces, and in places some injury from drought resulted. The rainfall in September was almost uniformly excellent. Light rain was also received in October in most districts, while November and December were entirely rainless and were followed by severe frost, which damaged the cane crop more or less in the western half of the province just when pressing had begun.

In the Panjab there was a decrease in the area sown in all districts except Jalandhar and Karnál owing to the absence of rain and deficient supply in the canals in February and March. The monsoon rainfall of August and September was satisfactory but the subsequent failure of the winter rains and the severe December frost deteriorated the condition of the standing crop, and in parts of Lahore, Sialkot, and Amritsar it was used as fodder. The yield on the whole was consequently below average.

In the North-West Frontier Province the season was favourable for the sugarcane crop, and the inadequate rainfall had very little effect on this crop as it is grown exclusively on irrigated lands, and the canal irrigation on which the crop depends was satisfactory.

In Madras there was a contraction in the area owing to the shortness of water-supplies in parts at the planting season. The decrease was general and was particularly noticeable in South Arcot where it was ascribed to a fall in the prices of jaggery. The crop was reported to be generally good.

Tables of Area and Yield

SUMMARY TABLE OF PRODUCTION IN

		1891-92	1892-93	1893-94	1894-95	1895-96	1896-97
Rice	acres . .	49,539,031	48,358,707	49,525,300	50,002,241	49,396,747	48,021,462
	cwt . .	314,804,161	420,282,625	459,119,400	497,901,780	415,355,100	275,676,100
Wheat	acres . .	27,033,172	27,655,858	28,716,535	28,421,851	24,071,320	20,579,727
	tons . .	6,500,815	7,626,494	7,268,641	6,998,930	5,380,342	5,363,289
Cotton	acres . .	11,491,985	13,025,642	15,228,990	14,919,903	14,500,162	14,691,795
	bales . .	1,588,817	2,119,908	2,480,692	2,116,143	2,497,977	1,991,207
Linseed	acres . .	3,211,000	3,824,700	4,854,100	3,781,684	2,954,093	2,020,747
	tons . .	390,000	489,900	559,800	271,798	287,407	162,479
Rape and mustard	acres . .	1,775,000	3,675,000	3,676,100	3,582,181	3,004 913	2,910,682
	tons . .	175,000	622,300	546,200	521,031	462,064	441,814
Sesamum	acres . .	2,037,000	2,106,800	2,198,040	3,000,969	3,171,472	3,369,198
	tons . .	138,000	199,138	176.599	253,972	249,936	217,688
Jute	acres . .	...	2,135,142	2,222,600	2,264,300	2,242,700	2,196,600
	bales . .	...	5,717,444	5,001,700	6,144,300	6,425,900	5,032,000
Indigo	acres . .	...	1,218,766	1,552 008	1,688,042	1,414,002	1,608,901
	cwt . .	...	179,056	179,437	237,494	190,924	168,673
Earthnut	acres . .	...	...	...	...	216,200	273,526
	tons . .	...	...	...	...	...	...
Sugarcane	acres . .	...	...	...	...	...	...
	tons . .	...	...	...	...	...	...

EACH YEAR FROM 1891-92 TO 1902-03

1897-98	1898-99	1899-1900	1900-01	1901-02	1902-03		
52,205,466	52,682,050	51,969,635	48,932,493	48,511,190	50,962,495	acres	Rice
498,350,700	505,640,600	451,553,460	413 506,700	384,294,100	461,460,200	cwt	
24,537,775	25,370,078	18,687,782	24,178,150	23,446,161	23,312,118	acres	Wheat
7,208,384	6,837, 74	5,357,142	7,181,507	6,090,524	7,894,412	tons	
14,023,237	14,403,092	11,657,576	14,366,350	14,[illegible]06,295	15,744,746	acres	Cotton
2,382,726	2,807,343	956,540	2,730,231	2,645,455	2,687,813	bales	
2,707,887	2,829,475	1,648,903	2,417,991	2,546,604	2,584,813	acres	Linseed
354,994	336,610	206,220	247,024	251,808	387,593	tons	
3,822,996	3,109,988	2,693,768	4,138,666	3,082,662	3,450,497	acres	Rape and mustard
682,807	567,698	447,946	662,370	525,035	544,654	tons	
3,662,109	3,530,625	3,316,067	4,052,491	3,711,711	4,181,163	acres	Sesamum
310,917	305,918	187,456	332,856	256,710	427,737	tons	
2,151,600	1,624,400	1,961,800	2,093,400	2,263,800	2,138,700	acres	Jute
6,189,200	4,115,500	5,000,000	6,400,000	6,500,000	5,328,000	bales	
1,339,099	1,010,318	1,026,900	990,375	791,190	574,654	acres	Indigo
166,812	139,320	111,890	148,029	112,819	73,908	cwt	
203,903	217,814	173,946	294,408	434,222	468,545	acres	Earthnut
55,962	70,561	9,250	28,631	63,298	40,983	tons	
...	2,502,381	2,563,570	2,425,156	2,317,224	2,206,631	acres	Sugarcane
...	2,076,234	1,852,801	2,451,604	2,197,724	2,037,772	tons	

RICE

Province	acres	cwt	Province	acres	cwt
Bengal			*Burma*		
1891-92 . . .	39,552,008	284,804,161	1891-92 . . .	4,215,023	(a)
1892-93 . . .	37,324,907	333,956,225	1892-93 . . .	4,625,600	50,346,000
1893-94 . . .	37,886,500	374,227,800	1893-94 . . .	4,928,600	47,874,000
1894-95 . . .	38,639,500	416,857,200	1894-95 . . .	4,793,341	45,381,980
1895-96 . . .	37,447,600	317,514,600	1895-96 . . .	5,068,147	41,481,000
1896-97 . . .	36,177,400	179,637,400	1896-97 . . .	5,224,062	47,679,000
1897-98 . . .	39,549,500	398,142,000	1897-98 . . .	5,720,766	52,217,000
1898-99 . . .	39,605,400	405,842,900	1898-99 . . .	5,910,650	44,851,000
1899-1900 . . .	39,490,500	357,956,360	1899-1900 . . .	6,050,135	54,160,000
1900-01 . . .	36,013,900	311,508,600	1900-01 . . .	6,326,993	52,975,000
1901-02 . . .	35,094,800	272,201,900	1901-02 . . .	6,558,190	60,602,000
1902-03 . . .	37,082,100	354,111,400	1902-03 . . .	6,580,795	53,022,000
Madras			*Total*		
1891-92 . . .	5,771,000	30,000,200	1891-92 . .	49,539,031	314,804,161
1892-93 . . .	6,408,200	35,980,400	1892-93 . .	48,358,707	420,282,625
1893-94 . . .	6,710,200	37,017,600	1893-94 . . .	49,525,300	459,119,400
1894-95 . . .	6,569,400	35,662,600	1894-95 . . .	50,002,241	497,901,780
1895-96 . . .	6,881,000	56,359,500	1895-96 . . .	49,396,747	415,355,100
1896 97 . . .	6,620,000	48,359,700	1896-97 . . .	48,021,462	275,676,100
1897-98 . . .	6,935,200	47,991,700	1897-98 . . .	52,205,466	498,350,700
1898-99 . . .	7,166,000	54,946,700	1898-99 . . .	52,682,050	505,640,600
1899-1900 . . .	6,429,000	39,437,100	1899-1900 . . .	51,969,635	451,553,460
1900-01 . . .	6,591,600	49,023,100	1900-01 . . .	48,932,493	413,506,700
1901-02 . . .	6,858,200	51,490,200	1901-02 . . .	48,511,190	384,294,100
1902-03 . . .	7,299,600	54,326,800	1902-03 . . .	50,962,495	461,460,200

(a) Not stated

WHEAT

Province	acres	tons
Panjab and N.-W. Frontier		
1891-92	6,224,000	1,420,000
1892-93	7,020,000	2,213,000
1893-94	8,265,000	2,560,000
1894-95	8,051,800	2,395,353
1895-96	6,893,400	1,753,766
1896-97	6,584,300	1,872,066
1897-98	8,013,800	2,358,975
1898-99	7,729,200	1,977,777
1899-1900	6,366,500	1,823,182
1900-01	9,080,000	3,028,580
1901-02	8,023,600	2,005,611
1902-03	7,934,600	2,624,491
United Provinces		
1891-92	6,502,097	2,035,229
1892-93	6,307,227	2,354,255
1893-94	6,674,389	1,854,695
1894-95	6,333,688	1,469,996
1895-96	5,177,261	1,591,294
1896-97	4,931,710	1,850,914
1897-98	5,985,146	2,249,633
1898-99	6,348,688	2,277,414
1899-1900	6,202,826	2,410,052
1900-01	6,790,440	2,384,605
1901-02	6,461,729	2,401,940
1902-03	6,926,164	2,972,497
Central Provinces		
1891-92	3,904,000	760,000
1892-93	4,197,000	762,000
1893-94	3,936,000	575,000
1894-95	3,393,348	502,275
1895-96	2,714,454	368,038
1896-97	1,969,623	332,645
1897-98	2,171,714	543,095
1898-99	2,505,299	456,169
1899-1900	1,633,070	201,803
1900-01	2,055,736	440,909
1901-02	2,620,138	571,040
1902-03	2,272,482	666,040

Province	acres	tons
Bengal		
1891-92	1,300,000	250,000
1892-93	1,559,000	466,000
1893-94	1,461,000	459,000
1894-95	1,413,000	686,300
1895-96	1,427,400	345,600
1896-97	1,311,700	386,000
1897-98	1,569,500	592,600
1898-99	1,582,500	656,400
1899-1900	1,550,300	572,700
1900-01	1,498,700	472,600
1901-02	1,408,300	391,500
1902-03	1,445,900	501,100
Bombay (including Native States)		
1891-92	2,176,000	426,000
1892-93	2,475,000	654,000
1893-94	2,525,000	762,000
1894-95	2,678,665	744,961
1895-96	2,288,838	454,865
1896-97	1,446,741	288,002
1897-98	2,004,832	627,914
1898-99	2,470,998	737,385
1899-1900	1,157,077	99,408
1900-01	1,433,810	298,479
1901-02	1,510,459	179,034
1902-03	1,617,891	502,508
Berar		
1891-92	888,000	186,055
1892-93	985,000	166,395
1893-94	928,000	170,893
1894-95	889,326	150,232
1895-96	747,025	103,084
1896-97	381,425	23,413
1897-98	390,378	41,983
1898-99	436,362	53,571
1899-1900	17,910	414
1900-01	243,554	29,900
1901-02	280,085	84,385
1902-03	216,955	17,498

WHEAT—*continued*

Province	acres	tons	Province	acres	tons
Sind (including Native States)			*Hyderabad*		
1891-92 . . .	483,000	117,000	1891-92 . . .	1,942,824	96,238
1892-93 . . .	604,000	204,000	1892-93 . . .	1,262,506	97,315
1893-94 . . .	531,000	161,000	1893-94 . . .	1,162,503	109,234
1894-95 . . .	673,251	215,361	1894-95 . . .	1,412,562	69,413
1895-96 . . .	315,559	71,683	1895-96 . . .	1,454,451	85,331
1896-97 . . .	406,752	116,470	1896-97 . . .	772,990	18,585
1897-98 . . .	591,621	177,160	1897-98 . . .	1,003,175	30,139
1898-99 . . .	369,706	81,231	1898-99 . . .	1,113,431	33,098
1899-1900 . . .	364,522	68,226	1899-1900 . . .	339,136	1,538
1900-01 . . .	479,487	123,160	1900-01 . . .	636,247	12,279
1901-02 . . .	534,004	109,009	1901-02 . . .	603,182	38,853
1902-03 . . .	301,648	68,531	1902-03 . . .	508,760	43,215
Rajputana			*Mysore*		
1891-92 . . .	1,471,000	362,000	1891-92 . . .	2,125	154
1892-93 . . .	1,604,000	431,000	1892-93 . . .	2,640	189
1893-94 . . .	1,646,000	389,000	1893-94 . . .	(b)	(b)
1894-95 . . .	1,529,146	368,168	1894-95 . . .	4,534	304
1895-96 . . .	1,306,868	315,573	1895-96 . . .	5,456	363
1896-97 . . .	1,374,346	293,932	1896-97 . . .	3,871	413
1897-98 . . .	1,302,233	307,062	1897-98 . . .	4,363	331
1898-99 . . .	1,196,014	276,388	1898-99 . . .	4,029	492
1899-1900 . . .	360,733	79,289	1899-1900 . . .	2,758	254
1900-01 . . .	713,290	170,682	1900-01 . . .	2,556	197
1901-02 . . .	541,834	103,869	1901-02 . . .	3,714	256
1902-03 . . .	818,399	190,841	1902-03 . . .	5,123	531
Central India			*Total*		
1891-92 . . .	2,040,126	898,139	1891-92 . . .	27,038,172	6,500,815
1892-93 (a) . . .	1,639,485	278,340	1892-93 . . .	27,655,858	7,626,494
1893-94 (a) . . .	1,537,143	227,819	1893-94 . . .	28,716,535	7,268,641
1894-95 . . .	2,042,531	396,567	1894-95 . . .	28,421,851	6,998,930
1895-96 . . .	1,740,608	290,745	1895-96 . . .	24,071,320	5,380,342
1896-97 . . .	1,866,269	179,949	1896-97 . . .	20,579,727	5,363,289
1897-98 . . .	1,501,013	279,492	1897-98 . . .	24,537,775	7,208,384
1898-99 . . .	1,613,851	287,749	1898-99 . . .	25,370,078	6,837,674
1899-1900 . . .	692,950	100,276	1899-1900 . . .	18,687,782	5,357,142
1900-01 . . .	1,244,330	220,116	1900-01 . . .	24,178,150	7,181,507
1901-02 . . .	1,459,116	255,027	1901-02 . . .	23,446,161	6,090,524
1902-03 . . .	1,264,196	307,160	1902-03 . . .	23,312,118	7,894,412

(a) Incomplete (b) No information

COTTON

Province	acres	bales of 400 lb
Bombay (including Native States)		
1891-92	5,136,000	683,000
1892-93	5,286,400	946,400
1893-94	5,910,900	927,100
1894-95	5,292,717	782,497
1895-96	5,303,598	915,575
1896-97	5,033,549	723,587
1897-98	4,751,103	834,004
1898-99	5,098,145	1,101,039
1899-1900	3,095,206	78,967
1900-01	4,240,140	672,278
1901-02	4,394,796	518,396
1902-03	4,276,903	795,233
Berar		
1891-92	2,244,000	347,820
1892-93	2,18 6,600	338,923
1893-94	2,184,800	409,650
1894-95	2,102,956	294,414
1895-96	2,071,856	388,473
1896-97	2,306,870	213,385
1897-98	2,150,329	435,442
1898-99	2,476,306	538,597
1899-1900	1,983,602	59,508
1900-01	2,521,651	630,413
1901-02	2,689,201	584,901
1902-03	2,766,300	(a) 275,514
Madras		
1891-92	1,243,000	80,000
1892-93	1,326,200	103,600
1893-94	1,724,000	121,200
1894-95	1,521,500	106,980
1895-96	1,623,900	120,524
1896-97	1,395,400	104,655
1897-98	1,509,100	118,876
1898-99	1,321,700	127,670
1899-1900	1,382,700	101,440
1900-01	1,373,300	118,320
1901-02	1,351,200	(b) 180,180
1902-03	1,527,400	156,260

Province	acres	bales of 400 lb
Hyderabad		
1892-93	1,384,450	168,004
1893-94	1,456,283	147,199
1894-95	1,611,912	117,277
1895-96	1,492,768	173,283
1896-97	1,558,296	137,152
1897-98	1,653,669	163,449
1898-99	1,738,379	222,302
1899-1900	1,292,329	91,975
1900-01	1,698,836	288,570
1901-02	1,689,139	300,301
1902-03	2,114,099	(c) 250,986
United Provinces		
1891-92	1,011,985	163,997
1892-93	837,892	161,881
1893-94	1,069,307	296,643
1894-95	1,214,747	198,833
1895-96	1,060,905	280,414
1896-97	1,150,069	260,521
1897-98	919,671	225,478
1898-99	933,395	261,304
1899-1900	996,673	227,787
1900-01	1,046,176	294,169
1901-02	1,153,870	368,638
1902-03	1,255,241	327,728
Panjab and N.-W. Frontier		
1891-92	498,000	112,000
1892-93	549,900	118,200
1893-94	948,300	200,900
1894-95	1,124,500	231,997
1895-96	1,161,200	241,667
1896-97	1,176,700	204,806
1897-98	1,128,400	223,947
1898-99	788,600	166,707
1899-1900	988,400	188,926
1900-01	1,215,400	205,203
1901-02	1,057,200	220,225
1902-03	1,221,000	234,778

(a) Defective.

(b) Estimated yield, including zamindári tracts, 181,200 bales

(c) Estimated yield, including jagir areas, 380,000 bales

COTTON—*continued*

Province	acres	bales of 400 lb
Central Provinces		
1891-92	738,000	52,000
1892-93	652,200	85,000
1893-94	690,700	79,600
1894-95	601,984	81,196
1895-96	541,087	105,940
1896-97 (a)	718,186	86,950
1897-98	668,847	118,994
1898-99	668,522	165,169
1899-1900	712,836	117,050
1900-01	1,004,812	(b) 268,958
1901-02	981,342	267,737
1902-03	1,139,714	269,662
Rajputana		
1891-92	517,000	117,000
1892-93	500,400	133,300
1893-94 (c)	617,600	171,700
1894-95	619,362	184,696
1895-96	514,854	150,862
1896-97	549,236	145,492
1897-98	542,435	137,669
1898-99	478,604	117,743
1899-1900	325,033	44,161
1900-01	369,384	104,390
1901-02	281,934	87,858
1902-03	456,503	164,142
Central India		
1893-94 (d)	295,300	31,900
1894-95	512,936	38,000
1895-96	420,239	49,500
1896-97	522,683	45,900
1897-98	417,456	60,600
1898-99	471,408	46,800
1899-1900	479,565	23,100
1900-01	542,673	63,900
1901-02	52[illegible],094	72,200
1902-03	586,122	98,200
Bengal		
1892-93	231,800	31,300
1893-94	216,000	30,400
1894-95	203,700	33,489
1895-96	197,900	25,009
1896-97	157,100	20,164
1897-98	174,000	29,890
1898-99	167,900	25,978
1899-1900	160,600	23,149
1900-01	127,700	26,069
1901-02	118,500	19,756
1902-03	114,300	20,400
Sind (including Native States)		
1891-92	104,000	33,000
1892-93	69,800	32,400
1893-94	115,800	64,400
1894-95	113,589	47,264
1895-96	111,855	43,730
1896-97	123,706	48,595
1897-98	108,227	34,437
1898-99	92,312	34,039
1899-1900	92,069	17,577
1900-01	84,560	36,884
1901-02	129,409	62,188
1902-03	153,158	74,001
Burma		
1898-99	167,821	—
1899-1900	148,563	32,900
1900-01	141,718	21,077
1901-02	130,610	13,125
1902-03	134,006	21,114
Total		
1891-92	11,491,985	1,588,817
1892-93	13,025,642	2,119,908
1893-94	15,228,990	2,480,692
1894-95	14,919,903	2,116,143
1895-96	14,500,162	2,497,977
1896-97	14,691,795	1,991,207
1897-98	14,023,237	2,382,726
1898-99	14,403,092	2,807,343
1899-1900	11,657,576	956,540
1900-01	14,266,350	2,730,231
1901-02	14,506,295	2,645,455
1902-03	15,744,746	2,687,813

(a) Exclusive of zamindári area in Raipur, Biláspur, and Sambalpur

(b) Represent exports and consumption of the years ending the 30th September as the estimates of the yield are imperfect

(c) Exclusive of Tonk

(d) Exclusive of the greater part of the Bhopal Agency

LINSEED

Province	acres	tons
Bengal		
1892-93	805,700	121,900
1893-94	777,100	131,800
1894-95	732,900	120,900
1895-96	712,700	95,600
1896-97	587,800	84,900
1897-98	662,800	125,400
1898-99	677,900	144,700
1899-1900	653,200	126,700
1900-01	806,700	133,400
1901-02	783,800	110,600
1902-03	864,200	160,000
United Provinces (a)		
1891-92	622,000	110,000
1892-93	481,000	74,000
1893-94	742,000	101,000
1894-95	753,857	69,165
1895-96	403,565	55,796
1896-97	235,166	40,036
1897-98	519,461	110,619
1898-99	438,728	87,854
1899-1900	357,880	73,267
1900-01	448,206	75,780
1901-02	373,092	75,876
1902-03	576,623	145,408
Central Provinces		
1891-92	1,888,000	112,000
1892-93	1,884,000	134,000
1893-94	1,788,000	132,000
1894-95	1,498,672	42,532
1895-96	730,750	45,258
1896-97	527,421	19,391
1897-98	683,728	69,783
1898-99	838,255	58,955
1899-1900	306,933	4,319
1900-01	495,165	20,652
1901-02	609,596	32,786
1902-03	495,457	42,271

Province	acres	tons
Hyderabad		
1896-97	324,455	11,355
1897-98	438,030	15,141
1898-99	426,045	13,445
1899-1900	171,970	1,506
1900-01	371,983	8,774
1901-02	370,376	18,408
1902-03	358,056	19,535
Berar		
1891-92	364,000	35,000
1892-93	354,000	21,000
1893-94	578,000	29,000
1894-95	385,563	13,893
1895-96	500,650	27,497
1896-97	188,142	4,576
1897-98	180,472	10,405
1898-99	171,085	7,683
1899 1900	21,564	—
1900-01	154,716	5,382
1901-02	185,738	9,606
1902-03	120,753	7,289
Bombay (including Native States)		
1891-92	270,000	19,000
1892-93	233,000	25,000
1893-94	402,000	52,000
1894-95	410,692	25,508
1895-96	606,428	63,261
1896-97	157,763	2,221
1897-98	223,396	23,646
1898-99	277,462	23,975
1899-1900	137,356	428
1900-01	141,221	3,036
1901-02	224,002	4,537
1902-03	169,724	13,992
Rest of India		
1891-92	567,000	114,000
1892-93	567,000	114,000
1893-94	567,000	114,000
Total		
1891-92	3,211,000	390,000
1892-93	3,824,700	489,900
1893-94	4,854,100	559,800
1894-95	3,781,684	271,798
1895-96	2,954,093	287,407
1896-97	2,020,747	162,479
1897-98	2,707,887	354,994
1898-99	2,829,475	336,610
1899-1900	1,648,903	206 229
1900-01	2,417,991	247,021
1901-02	2,546,604	251,808
1902-03	2,584,813	387,599

(a) Linseed is also sown in the United Provinces as a mixture with other crops on an area of about 4 million acres on the average but forms a small share of the total of the mixed crop. The outturn which cannot be determined with any precision is gathered mostly for home consumption

RAPE AND MUSTARD

Province	acres	tons
Bengal		
1892-93	2,256,000	372,300
1893-94	2,209,100	334,200
1894-95	2,221,600	343,700
1895-96	2,148,400	332,400
1896-97	2,003,900	312,300
1897-98	2,239,700	438,600
1898-99	2,167,200	448,200
1899-1900	2,032,900	371,900
1900-01	2,043,200	337,800
1901 02	1,922,400	372,900
1902-03	1,907,800	340,600
Panjab and N.-W. Frontier		
1891-92	594,000	68,000
1892-93	850,000	135,000
1893-94	900,000	112,000
1894-95	802,600	97,224
1895-96	475,100	50,602
1896-97	515,300	52,756
1897-98	1,112,300	142,115
1898-99	582,600	56,041
1899-1900	397,500	26,761
1900-01	1,699,700	260,167
1901-02	739,500	73,084
1902 03	1,055,800	107,519
United Provinces(a)		
1891-92	132,000	32,000
1892 93	126,000	27,000
1893-94	131,000	21,000
1894-95	109,347	16,497
1895-96	95,678	26,554
1896-97	83,372	18,524
1897-98	88,822	28,417
1898-99	92,679	22,884
1899-1900	76,180	21,186
1900-01	94,130	24,060
1901-02	120,436	36,841
1902-03	141,884	49,922
Hyderabad		
1896-97	1,994	73
1897-98	3,828	140
1898-99	8,796	286
1899-1900	905	6
1900-01	16,597	286
1901-02	12,077	146
1902-03	12,377	282

Province	acres	tons
Sind (including Native States)		
1891-92	169,000	22,000
1892-93	140,000	20,000
1893-94	111,000	17,000
1894-95	222,413	24,852
1895-96	53,664	8,503
1896-97	72,093	11,101
1897-98	154,248	27,277
1898-99	70,766	8,601
1899-1900	64,657	6,193
1900-01	119,596	12 304
1901-02	113,140	12,049
1902-03	103,293	10,551
Assam		
1891-92	168,000	36,000
1892-93	170,000	45,000
1893-94	168,000	34,000
1894-95	134,399	20,249
1895-96	182,640	36,388
1896-97	178,408	38,853
1897-98	167,268	31,878
1898-99	134,856	21,891
1899-1900	119,110	21,789
1900-01	126,309	21,140
1901-02	157,671	28,294
1902-03	173,984	27,788
Bombay (including Native States)		
1891-92	44,000	7,000
1892-93	65,000	13,000
1893-94	89,000	18,000
1894-95	91,822	18,509
1895-96	49,431	7,617
1896-97	55,615	8,207
1897-98	56,830	14,380
1898-99	53,091	9,795
1899-1900	2 536	111
1900-01	39,134	6,613
1901-02	17,438	1,721
1902-03	55,359	7,992
Rest of India		
1891-92	68,000	10,000
1892-93	68,000	10,000
1893-94	68,000	10,000
Total		
1891-92	1,175,000	175,000
1892-93	3,675,000	622,300
1893-94	3,676,100	546,200
1894-95	3,582,181	521,031
1895-96	3,004,913	462,064
1896-97	2,910,682	441,814
1897-98	3,822,996	682,807
1898-99	3,109,988	567,698
1899-1900	2,693,768	417,946
1900-01	4,138,666	662,370
1901-02	3,082,662	525,035
1902-03	3,450,497	544,654

(a) Rapeseed is also sown in the United Provinces as a mixture with other crops on an area of about 8½ million acres on the average but forms a small share of the total of the mixed crop. The outturn which cannot be determined with any precision is gathered mostly for home consumption

SESAMUM

Province	acres	tons
Madras		
1891-92	501,000	4,900
1892-93	318,600	(a) 5,522
1893-94	296,300	5,290
1894-95	613,600	16,739
1895-96	824,700	22,507
1896-97	562,800	14,830
1897-98	826,000	24,100
1898-99	690,700	25,900
1899-1900	665,900	19,300
1900-01	850,000	28,200
1901-02	727,700	26,900
1902-03	797,000	30,300
Bombay (including Native States)		
1891-92	590,000	79,000
1892-93	703,500	105,500
1893-94	668,600	78,900
1894-95	754,072	100,438
1895-96	843,039	98,104
1896-97	770,553	65,600
1897-98	681,905	103,136
1898-99	754,327	115,566
1899-1900	303,148	6,186
1900-01	719,642	105,167
1901-02	802,935	64,421
1902-03	915,641	177,580
Central Provinces		
1891-92	456,000	17,000
1892-93	508,000	33,000
1893-94	534,700	31,300
1894-95	520,099	27,714
1895-96	569,407	45,243
1896-97	627,948	43,953
1897-98	749,491	67,770
1898-99	634,268	43,475
1899-1900	1,026,257	62,132
1900-01	983,260	82,138
1901-02	710,641	39,020
1902-03	882,729	78,191
Bengal		
1894-95	356,200	43,400
1895-96	368,900	36,000
1896-97	332,500	30,800
1897-98	367,500	49,900
1898-99	367,200	52,100
1899-1900	388,200	49,700
1900-01	396,000	45,400
1901-02	411,100	54,900
1902-03	384,800	46,200
Panjab and N.-W. Frontier		
1891-92	122,000	15,000
1892-93	204,500	25,900
1893-94	234,800	25,900
1894-95	319,200	31,917
1895-96	189,400	18,772
1896-97	223,400	21 379
1897-98	195,400	22,984
1898-99	252,600	25,350
1899-1900	216,400	16,253
1900-01	218,500	19,077
1901-02	211,500	17,640
1902-03	214,000	20,819

Province	acres	tons
United Provinces		
1891-92	142,000	8,000
1892-93	152,600	14,700
1893-94	200,600	19,700
1894-95	177,043	15,513
1895-96	148,833	14,554
1896-97	177,785	12,222
1897-98	147,817	14,994
1898-99	155,178	15,159
1899-1900	203,604	22,743
1900-01	238,154	28,431
1901-02	252,870	23,226
1902-03	315,698	35,280
Sind (including Native States)		
1891-92	103,000	(a) 7,800
1892-93	109,500	10,516
1893-94	177,740	12,309
1894-95	191,040	15,892
1895-96	151,038	12,052
1896-97	183,873	12,384
1897-98	154,812	8,260
1898-99	114,129	8,285
1899-1900	158,957	7,323
1900-01	105,881	4,468
1901-02	99,693	5,985
1902-03 (a)	97,797	5,278
Berar		
1891-92	123,000	6,300
1892-93	115,100	4,000
1893-94	85,300	3,200
1894-95	69,715	2,359
1895-96	76,155	2,704
1896-97	103,298	3,515
1897-98	135,164	6,573
1898-99	185,483	5,620
1899-1900	116,089	1,436
1900-01	149,022	9,554
1901-02	118,249	2,958
1902-03	137,974	4,868
Hyderabad		
1896-97	387,041	13,005
1897-98	404,020	13,200
1898-99	426,740	14,463
1899-1900	237,512	2,383
1900-01	392,032	10,421
1901-02	377,023	21,660
1902-03	405,524	29,271
Total		
1891-92	2,037,000	138,000
1892-93	2,106,800	199,138
1893-94	2,198,040	176,599
1894-95	3,000,969	253,972
1895-96	3,171,472	249,986
1896-97	3,369,198	217,688
1897-98	3,662,109	310,917
1898-99	3,530,625	305,918
1899-1900	3,316,067	187,456
1900-01	4,032,491	332,856
1901-02	3,711,711	256,710
1902-03	4,181,163	427,737

(a) Incomplete

JUTE

Province	acres	bales of 400 lb
Bengal		
1891	(a) 1,403,445	(a) 2,971,794
1892	2,135,142	5,717,444
1893	2,222,600	5,001,700
1894	2,264,300	6,144,300
1895	2,242,700	6,425,900
1896	2,196,600	5,032,000
1897	2,151,600	6,189,200
1898	1,624,400	4,115,500
1899	1,961,800	5,000,000
1900	2,093,400	6,400,000
1901	2,263,800	6,500,000
1902	2,106,300	5,280,000
Assam		
1902	32,400	48,000
Total		
1902	2,138,700	5,328,000

INDIGO

Province	acres	cwt
Bengal		
1892-93	645,950	92,006
1893-94	648,928	67,285
1894-95	629,100	104,485
1895-96	552,700	78,133
1896-97	582,200	56,671
1897-98	529,500	50,415
1898-99	512,100	74,321
1899-1900	449,200	44,996
1900-01	360,600	47,707
1901-02	311,200	41,820
1902-03	253,500	21,585
United Provinces		
1891-92	201,269	20,533
1892-93	206,516	26,545
1893-94	349,980	38,106
1894-95	420,242	41,524
1895-96	342,102	33,786
1896-97	436,601	40,713
1897-98	376,899	37,545
1898-99	240,418	26,416
1899-1900	231,400	17,977
1900-01	262,175	31,529
1901-02	168,990	18,986
1902-03	93,154	10,007
Madras		
1891-92	166,130	18,540
1892-93	301,000	50,420
1893-94	442,400	58,100
1894-95	514,500	67,480
1895-96	414,900	63,680
1896-97	454,700	50,740
Madras—continued		
1897-98	323,900	61,460
1898-99	210,600	30,320
1899-1900	249,000	33,340
1900-01	251,900	46,100
1901-02	239,400	38,480
1902-03	186,000	35,300
Panjab		
1891-92	52,200	9,256
1892-93	65,300	10,085
1893-94	110,700	15,946
1894-95	124,200	24,005
1895-96	104,300	20,325
1896-97	135,400	20,549
1897-98	108,800	17,392
1898-99	47,200	8,263
1899-1900	97,300	15,577
1900-01	115,700	22,693
1901-02	71,600	13,533
1902-03	42,000	7,016
Total		
1891-92 (a)	419,599	48,329
1892-93	1,218,766	179,056
1893-94	1,552,008	179,437
1894-95	1,688,042	237,494
1895-96	1,414,002	190,924
1896-97	1,608,901	168,673
1897-98	1,339,099	166,812
1898-99	1,010,318	139,320
1899-1900	1,026,900	111,990
1900-01	990,375	148,029
1901-02	791,190	112,819
1902-03	574,654	73,908

(a) Incomplete

EARTHNUT

Province	acres	tons
Madras		
1895-96	216,200	(a)
1896-97	124,800	
1897-98	83,600	
1898-99	116,200	
1899-1900	102,000	
1900-01	229,997	
1901-02	337,600	
1902-03	421,900	
Bombay (including Native States)		
1896-97	148,726	(a)
1897-98	120,303	(b) 55,962
1898-99	101,614	70,561
1899-1900	71,946	9,250
1900-01	64,411	28,631
1901-02	96,622	63,298
1902-03	46,645	40,933

	acres	tons
Total		
1895-96	(c) 216,200	(a)
1896-97	273,526	(a)
1897-98	203,903	(d) 55,962
1898-99	217,814	(d) 70,561
1899-1900	173,946	(d) 9,250
1900-01	294,408	(d) 28,631
1901-02	434,222	(d) 63,298
1902-03	468,545	(d) 40,933

SUGARCANE

Province	acres	tons
Bengal		
1898-99	861,100	871,435
1899-1900	884,400	817,185
1900-01	801,800	811,420
1901-02	661,200	676,410
1902-03	664,700	672,675
United Provinces		
1898-99	1,227,881	1,204,799
1899-1900	1,259,070	838,885
1900-01	1,212,456	1,193,214
1901-02	1,228,691	976,222
1902-03	1,159,779	904,132
Panjab and N.-W. Frontier		
1898-99	367,900	(a)
1899-1900	365,700	196,731
1900-01	355,500	446,970
1901-02	376,233	435,692
1902-03	336,052	367,565

Province	acres	tons
Madras		
1898-99	45,500	(a)
1899-1900	54,400	(a)
1900-01	55,400	(a)
1901-02	51,100	109,400
1902-03	46,100	93,400
Total		
1898-99	2,502,381	(d)2,076,234
1899-1900	2,563,570	(d)1,852,801
1900-01	2,425,156	(d) 2,451,604
1901-02	2,317,224	2,197,724
1902-03	2,206,631	2,037,772

(a) No information (b) Excluding Native States (c) Madras only (d) Incomplete

In the North-Western Provinces and Oudh the area sown with rape and linseed was seriously reduced by excessive rainfall, and the crops suffered from rust and insects following on continued wet in the spring.

In Bengal also sowings were impeded by excessive rain. The crop was afterwards seriously affected by the failure of the cold weather rains, and a wet March injured rape and mustard in many districts. The yield was estimated at not quite three-fourths of the average.

In the Central Provinces in the earlier months the crop promised fairly well, but heavy rain, shortly after sowing, damaged the seedlings. Cloudy weather continued, rust set in, and much injury was done, but nevertheless the yield was much larger than the average.

In Bombay seasonable rain stimulated sowings of linseed, both area and yield being much better than the average. In Sind rapeseed suffered from insufficient water-supply, blight, and frost.

In Berar the sowing of linseed was late owing to heavy rain in October and November. The crop was much affected by untimely rain and rust, and the yield was eleven-sixteenths of the average.

In the Nizam's Territory excessive rain caused a contraction in places of the area sown, while in others timely rainfall promoted sowings. The yield was 20 per cent above the average.

In Assam the season was favourable for the mustard crop, and sowings were slightly above the average, but the yield was below it.

1894-95

In the Panjab the area sown was contracted owing to deficient rainfall at the time of sowing; and excessive rain injured the crop in the submontane districts. The condition of the crop varied from average to poor, and the yield did not reach the full standard.

In the North-Western Provinces and Oudh the linseed and rapeseed crops were injured by excessive moisture and by fungoid disease. The area under linseed was 26 per cent larger than the average, but the yield 31 per cent below it. The area under rapeseed and the yield were smaller than the average.

In Bengal sowings were somewhat restricted owing to the prolonged monsoon rain, and the crop was injured by the absence of rain from November until the middle of January. The yield was estimated at three quarters of a full average crop.

In the Central Provinces untimely rain and cloudy weather throughout the winter caused damage to the crop. Insects attacked it, rust set in, and the crop was practically ruined. The yield was only about a fourth of an average.

In Bombay excessive moisture affected the area sown with linseed, and blight injured the crop. In Sind an extended area was sown with rapeseed owing to favourable floods; but the yield was not proportionate to the increase in the area.

In Berar the unusual prevalence of cloudy weather, and afterwards storms and winds, deteriorated the linseed crop. Rust set in, and the yield was much below the average.

In the Nizam's Territory the winter rains caused injury to the crop.

The area under mustard in Assam was small and the yield inferior, owing to the unfavourable character of the season.

1895-96

The season generally, in the provinces in which linseed, rapeseed, and mustard are largely grown, was marked by scanty monsoon rains, which ceased much earlier than usual, and by an almost entire failure of the winter rains. The conditions, which were very unfavourable for wheat, were less so for the oilseeds in Bengal, Bombay, Berar, and Hyderabad, but were quite as bad in the Panjab, Sind, the North-Western Provinces and Oudh, and the Central Provinces.

The yield of linseed was much below the average, though larger than that of 1894-95 when the harvest was injuriously affected by prolonged wet. The area sown was restricted in Northern India by the dryness of the soil; but this dryness led to an expansion in the sowing of linseed in Bombay and Berar, much land considered too dry for wheat having been placed under linseed.

The area under rapeseed, on the other hand, was more or less contracted everywhere except in the Nizam's Territory, and the contraction was very material in the Panjab, the North-Western Provinces and Oudh, Bombay, and Sind. The harvest, however, was good on the reduced area in the North-Western Provinces, and in Bengal it was not much below the average; so that although the yield was very poor in the Panjab, Sind, and Bombay, the general result was a crop which was much better than that of the previous year and was just over the average.

In Assam the season was somewhat more favourable than in 1894-95 in the lower districts, but in Upper Assam it suffered much from want of rain.

1896-97

The monsoon suddenly withdrew in the middle of August, and the drought which followed prevented extensive sowings. In Northern India the winter rains were timely and sufficient and of great benefit, but they, like the monsoon rains, failed in Central and Western India where the crops suffered severely.

The area sown with linseed was greatly contracted in the North-Western Provinces and Oudh, the Central Provinces, Bombay, and Berar owing to want of moisture in the soil at

sowing time. The yield was also much below the average, especially in the Central Provinces and Berar, while in Bombay the crop almost entirely failed. In Bengal and the North-western Provinces and Oudh the crop was better, having been greatly benefited by the winter rains.

The area under rape and mustard was larger than in 1895-96 in the Panjab, Bombay, and Sind, but was somewhat restricted in Bengal and the North-Western Provinces. The harvest was generally fair. The short rainfall in Assam was unfavourable for sowing mustard, and the yield was considerably below the average for want of rain during the period of growth.

1897-98 Conditions in the Panjab, the North-Western Provinces, and Bengal were favourable at sowing, and although the area sown was less than the average, except in the Panjab where the acreage under rapeseed was much greater, the yield was considerably more than the average.

The conditions in Central and Western India were generally not favourable and the area sown was greatly contracted, and the yield deficient in proportion. The rapeseed crop, however, did better in Bombay and Sind. In Bombay the yield was 12 and in Sind 10 per cent above the average.

The mustard crop in Bengal and Assam was on a reduced scale in consequence of retarded sowings and deficient winter rains.

1898-99 In the Panjab the season was very unfavourable for rapeseed, insufficient rain at sowing time and drought when the crop was maturing doing great damage. The area sown was smaller than the average and the yield extremely low.

In the North-Western Provinces and Oudh excessive moisture at sowing time and the substitution of food-grains for other crops, led to a contraction in the area under linseed and rapeseed. The winter rain, however, was seasonable, and though rapeseed was injured by frost in places, both crops on the whole did fairly well. The yield of linseed was materially and of rapeseed a little in excess of the average.

In Bengal the conditions of the season were generally favourable, the moisture in the soil from the autumn rain, and the silt in many places from the early subsidence of the floods in September, being beneficial to the crop. The yield of linseed, rape, and mustard, was large.

In Assam the sowing of mustard was restricted owing to the late subsidence of the floods, and the yield was also very small.

In the Central Provinces the young plants on the lighter soils and on slopes withered in the drought and heat of November and December; injury was caused by frost and cloudy weather on low-lying lands in some of the northern districts. The area sown was greatly below the average and the yield poor.

In Bombay sowings of linseed were restricted, owing partly to the cultivation of other crops and partly to the unfavourable character of the season. In Khandesh the rain at sowing time was seasonable and sufficient, and in Dharwar it was excessive; but elsewhere in the Deccan and the Karnátak the late rains were insufficient and the crop suffered. It was also injured in places by wind and insects. Sowings of rapeseed were restricted in Native Gujarat (except in Baroda) in consequence of insufficient rain, but in the British districts sufficient moisture in the soil and favourable winter rains stimulated larger sowings. The area and yield, however, were low, the yield disproportionately so.

In Sind, as the result of a low inundation, there was a very great contraction in the area under rapeseed. The crop was also injured by frost in some places, and the yield was very small.

In Berar the monsoon was favourable and sowings were conducted under seasonable conditions; but the crop suffered from the failure of the late rains. The area was the lowest on record, and the yield was 60 per cent below the average.

In the Nizam's Territory the yield of linseed was larger than the average. Mustard and rapeseed did well, but these form a small crop.

Sesamum (*til or jinjili*).

1891-92 In the Panjab the season was decidedly unfavourable, the late arrival of the monsoon causing a reduction in the area sown. The crop was damaged by locusts, and the yield was very poor.

In the North-Western Provinces and Oudh the monsoon rain was quite abnormal, light in the beginning, but excessive at the latter end of the season. The area was reduced by one-third of the average, and the yield was estimated at half a full crop.

In the Central Provinces the season was unfavourable and sowings were greatly restricted. The crop was very poor.

In Bombay the rain at sowing time was favourable, but the growing crop suffered from drought as well as from excess of moisture in places. The yield was estimated to vary from a quarter to three quarters of an average crop. In Sind a low inundation and locusts affected both area and yield.

In Berar excessive rain and insects injured the crop, though its condition was favourable in some districts owing to sufficient and seasonable rain.

In Madras the area was reduced by the unfavourable character of the season, and the yield was estimated at three-eighths of an average crop.

1892-93

In the Panjab the spring was very dry and the summer rains late, but they were heavy at the end of July stimulating sowing with the result that the area was 23 per cent above the average. The yield also was more than a full average.

In the North-Western Provinces and Oudh sowing was somewhat delayed by the late commencement of the monsoon, but light rain in July proved very favourable to the crop. Heavy rains in August did some injury, but the crop on the whole remained in good condition.

In the Central Provinces conditions were favourable except in tracts where excessive rain damaged the crop. Both area and yield were above the average.

In Bombay, there was timely rain, and extended sowings were made in the Deccan and Karnátak; prospects were affected by heavy rain late in the season, but the yield was estimated to be greater than in the preceding year. In Sind the harvest was much below the average.

In Berar unfavourable rain and the rotation of crops caused a decrease in the area sown. The crop promised well, but excessive rain at the close of the monsoon affected the yield seriously.

In the Madras Presidency, owing to exceptionally favourable rainfall in February and March, extensive sowings were made and a fair yield was expected, but drought in some places, and exceptionally heavy rain in others, injured the growing crop, and the yield was less than half the average.

1893-94

In the Panjab, though the season had very different effects in different districts, there was a general increase in the sown area; but the yield was below the average.

In the North-Western and Central Provinces the weather was suitable for sowings, and the crops promised well at first, but excessive rain in the autumn caused injury, though less in the North-Western than in the Central Provinces.

In Bombay there was a considerable decrease in the area sown, owing to untimely rain and an extension of cotton cultivation. Rain was excessive in September, and the yield was estimated at 24 per cent below the average.

In Sind, owing to the want of rain and the early subsidence of the river, the yield was not proportionate to the extended area sown.

In Berar the early sowings were impeded by deficient, and the later sowings by excessive, rainfall; and excess of rain in September injured the prospects of the yield.

Heavy rain also interfered with sowing in the northern and north-eastern parts of Madras, but elsewhere in this province the season was favourable. The late crop was well up to the average in the central districts, but in the southern districts the absence of rain in January and February restricted the area. In no part of the province was the crop a good one, the yield being only half of the average.

In the Nizam's Territory the crop was damaged by excessive rain during the harvesting season.

1894-95

In the Panjab suitable rains and previous high prices favoured extended sowings, but the premature cessation of the early rains combined with an excess in the later rains to reduce the yield to thirteen-sixteenths of the average.

In the North-Western and Central Provinces the season began well, but injury was afterwards done by excessive rains, especially in the Central Provinces, where they not only damaged the crop in flower but also seriously impeded harvesting operations. In the North-Western Provinces the loss occasioned by the rains was considerable.

In Bombay the early sowings were injured by rain, but the increased area sown later more than counterbalanced the loss. The yield was about three-fifths below the standard taken for a full crop, owing mainly to scanty rain after sowing and to excessive rain when the crop was in flower.

In Sind the area sown was above the average owing to favourable rain and extensive flood, and the yield was estimated at two-thirds of a full crop.

In Berar an extension of jawar sowings and the low prices obtained for sesamum in the previous year combined to reduce the area sown. Rain did much damage to the crop in flower, and the yield was generally poor.

In Madras heavy rains interfered with sowings of the early crop, especially in the Carnatic. The very early cessation of the north-east monsoon rainfall greatly restricted the area sown with the late crop, especially in the Carnatic and the southern districts. Owing to the continuance of unfavourable conditions the yield was estimated at about half of the average.

1895-96

In the Panjab the rainfall was unfavourable and the area sown less than the average. The crop on the whole was poor and below the average.

In the North-Western Provinces and Oudh the rains were timely and favourable for sowing, but they ceased in July, were moderate in August, and scanty in September and October. The area sown was below the average, and the crop did not develope fully, while insects and strong winds in some places did further damage. The yield did not come up to the expectations formed of it.

In the Central Provinces the season was generally favourable for sowing, and rainfall was well distributed to the end of August. This encouraged more extended sowings than usual, and the area sown was 34 per cent above the average. The season turned adversely later by reason of deficient rain and the abnormal heat which prevailed to the end of November. The yield was estimated at about 75 per cent of the full standard average.

In Bombay the area sown was above the average, rainfall having been seasonable, but the crops, both early and late, suffered from want of moisture, and the yield was below the average. In Sind scanty rain and a low inundation curtailed the area, the young crop suffered from want of moisture, and the yield was below the average.

In Berar there was satisfactory rain at the time of sowing, but a long period of drought followed, and the yield was 38 per cent below the average.

In Madras the early crop covered an area greater than the average owing to the favourable character of the early rain, and the late crop an area smaller than the average on account of the excessive sowing of the early crop. Rain was too heavy in some places while it was deficient in others, and the yield from both crops was estimated at half the average.

1896-97

Everywhere except in Madras and Bombay an extended breadth of land was sown, but the early withdrawal of the monsoon after the middle of August proved as unfortunate for sesamum as for other crops.

In the Panjab the crop was very poor, and though the area sown exceeded the average, the yield was 11 per cent below it.

In the North-Western Provinces and Oudh the prospect of a fair season disappeared with the withdrawal of the monsoon in August, and the crop was greatly injured, especially in unirrigated lands. Although the area sown was comparatively large, the yield was below that of 1895.

In the Central Provinces the area sown was large, but the crop generally fared badly except in Nagpur: and the yield was more or less poor, though much larger than the average owing to the increasing favour with which the cultivators regarded the crop.

In the Bombay Presidency, with the exception of Gujarat and Sind, the early withdrawal of the monsoon seriously injured the crop. In Gujarat the season was favourable and this oilseed took the place of damaged cotton. In Sind the inundation was good.

In Berar also a large area was placed under the crop owing to the promise at sowing time of a good season, but the drought which supervened injured the crop greatly, and the yield was estimated at 40 per cent less than the average.

In Madras the sowings of the early crop were greatly contracted owing to the want of seasonable rainfall, while those of the late crop were extended from timely rain. The former crop suffered severely from drought, and the result was a poor yield estimated at less than half a crop. The latter did not apparently suffer so much, but the yield was estimated at half the average.

1897-98

The late arrival of the south-west monsoon and the desire of the people to place greater breadths of land under food crops accounted for a contraction of the area sown with sesamum in most provinces. The yield varied greatly from about an average crop in Bombay, the North-Western Provinces, and the Panjab, to greatly below the average in Madras, Sind, and the Nizam's Territory. In the Central Provinces and Berar the conditions were exceptionally favourable; the area sown was more than ordinarily large, and the yield was estimated at about double the average. These large yields so far balanced the less favourable results in other provinces that the aggregate yield for all the reporting provinces was well in excess of the average.

1898-99

In the Panjab the area sown was a little larger than the average, but the cessation of the rain when the crop was ripening was followed by a poor yield.

In the North-Western Provinces and Oudh the area sown was 13 per cent smaller than the average. Excessive rain towards the latter part of the season deteriorated prospects, and the yield closely approximated to that of the preceding year.

In the Central Provinces the season was unfavourable, owing to the uneven distribution of the rainfall. The early sown crop suffered from excessive rain, and from the sudden withdrawal of the monsoon which left insufficient moisture in the soil and interfered with the development of the plants. The germination of the late sown crop was very defective, owing chiefly to excessive rain at sowing time, and the yield was three fourths of the average.

In Bombay the increase in the area sown in parts of Gujarat and north Deccan, due to favourable rains at sowing time, did not suffice to counterbalance the large decreases elsewhere, which were attributed to insufficient rain in the southern Deccan and Karnátak and to a low inundation in Sind. The season was generally favourable and the yield was materially larger than the average.

In Berar the sowings were made under favourable seasonal conditions and covered an area 18 per cent above the average, and though the crop was injured by the failure of the late rains, the yield was still largely in excess of the average.

In Madras the season was favourable for the late crop, and it grew in good conditions on an area much larger than the average. But the area under the early crop, which occupies about three times the area sown with the late crop, yielded much less than the average.

In the Nizam's Territory the yield was much below the average.

JUTE.

1891 The rainfall when sowings were being made was excessive, and the area placed under the crop was smaller than in the preceding year. Germination and growth were also affected by excessive rainfall. Later, again, the want of rain was felt in several districts, and the yield was estimated at from eleven to twelve-sixteenths of an average crop.

1892 Excessive rainfall injured the plant in some districts, but on the whole the season was good, a larger area than in the preceding year was cultivated under the stimulus of high prices, and the yield was estimated to be a little above the average.

1893 The area sown was nearly equal to that of 1892, but the crop was greatly injured in most districts by heavy and continuous rain in the middle of the season, and the yield was estimated to be about seven-eighths of the average.

1894 Rain was abundant and well distributed to the end of May, and the area sown was about equal to that of 1893. In June rain was deficient in several districts, though normal or in moderate excess in parts. At the end of July there was general and heavy rain throughout north Bengal, and during the first half of August the fall was favourable in every district. The yield was estimated to be slightly above the average.

1895 The rainfall was in excess of the normal quantity in April and the first half of May, heavy in the second half of May in east Bengal, and less than the average in other parts. In the next two months it was deficient, and in the first half of August it continued deficient in central and western Bengal, and was excessive in north Bengal and north Bihar. The area sown was almost the same as in the preceding year; but the yield was larger, being estimated at a sixteenth above the full average.

1896 Owing to scanty rain when sowings were made the area placed under the crop was a little smaller than in 1895. In May and the early part of June excessive rain interfered with growth and with weeding. In July and August it was deficient, still further impairing the prospects of the crop in most districts. The yield was estimated at seven-eighths of the average.

1897 On the whole the season was favourable, and there was enough water for steeping. The area was estimated to be a little smaller than in 1896, but the yield was said to be equal to those of 1894 and 1895, or a sixteenth above the average.

1898 The area sown was smaller than in 1897 owing partly to the unfavourable character of the season at sowing time, and partly to the low prices of jute in 1897 and to high prices of food-grains. The yield was estimated at seven-eighths of a normal crop.

INDIGO.

1891-92 In the Panjab the late arrival of the rains, and the ravages of locusts in some places, reduced the area to nearly half the average. The yield was generally below the average.

In the North-Western Provinces and Oudh the rains commenced very late and were heavy and continuous, causing a diminution in the area sown. The excessive drought in June and July seriously tried the crop, while the continued wet weather of August prevented the proper development of dye in the leaves. The yield was about half a full average.

In Bengal the season was altogether disastrous in consequence of an unusual deficiency of rainfall, and although the weather was more favourable at the manufacturing season, the yield hardly improved.

In Madras also the area was much below the average owing to the unfavourable character of the season, and the crop was estimated at only half the average.

1892-93

In the Panjab a protracted drought in the early summer retarded sowing, and the area sown was very much less than the average.

In the North-Western Provinces and Oudh the autumn rains were late, heavy, and continuous, and the plants suffered to some extent; but the yield of dye was much better than in the preceding year.

In Bengal the season was unfavourable at sowing time owing to deficiency of rainfall in autumn and spring; conditions improved later by favourable rainfall, but excessive rain and cloudy weather during manufacture again operated injuriously. In Bihar the weather was favourable throughout, although in some parts very heavy rain and floods caused some injury.

In Madras the crop was on the whole good, and it would have been very good throughout but for the unfavourable character of the season in December.

1893-94

The rainfall was favourable in the Panjab, and the state of the canals generally satisfactory, the result being a large area sown and a yield which was equal to the full average in seed and to a sixteenth less than the full average in dye.

In the North Western Provinces and Oudh a favourable season and a rise in the price of indigo at Calcutta led to an increase in the area sown: the seed germinated freely, and the early commencement of the rains greatly benefited the crop.

In Bengal the rainfall was favourable at sowing time, and a somewhat larger area than usual was placed under indigo, but heavy and incessant rain and floods caused great damage, and the yield was below the average.

In Madras larger sowings were made owing mainly to timely rains, and the crop yielded three-fourths of a full average.

1894-95

In the Panjab the area sown for dye largely increased, with a yield which was much above the average.

In the North-Western Provinces and Oudh, although the seed germinated well and timely rain benefited the crop, it suffered from deficient rain in the second half of July and from heavy and continuous rain in August; but the average condition was not much below that of the preceding year.

In Bengal the season was on the whole somewhat late, but the weather was generally favourable. In Bihar, the early part of the season was particularly good, but it was followed by a long period of drought which injured the produce in most districts in the early part of the manufacturing season.

In Madras the large area sown and the fair yield secured in the preceding year led to a further increase in cultivation; the yield was generally fair.

1895-96

In the Panjab the crop was fair, the yield of dye being 8 per cent smaller than the full standard.

In the North-Western Provinces and Oudh the crop suffered at first from want of rain in most districts, and then improved with moderate and favourable rainfall, except in the Upper Doab where it suffered from floods. On the whole, however, the condition of the crop was better than in the preceding year.

In western Bengal the rainfall on the whole was deficient and untimely; in northern and eastern Bengal and in Bihar it was favourable in most parts. The yield for the province was below the average.

In Madras the season was favourable in Kistna and North Arcot where a larger area was placed under indigo, but elsewhere sowings were restricted owing to the insufficient rain of the south-west monsoon. The standing crop was generally good, and the yield fair.

1896-97

In Bengal, owing to the early cessation of the monsoon of 1895 and the scanty showers in the spring of 1896, moisture was generally deficient at sowing, the deficiency continuing in most districts with the result that the yield was below the average. In Bihar the first cuttings were generally poor, but the dry weather gave an extremely and unusually good second cutting which in many places in north Bihar more than compensated for the deficient first crop.

In the North-Western Provinces and Oudh germination was satisfactory and prospects very favourable until July, but the late rains were scanty and unevenly distributed. The crop suffered in consequence and the yield was not very large.

In the Panjab the rainfall was scanty, but the condition of the young crop was generally fair. Later in the season the continued deficiency of rain was felt severely, and the crop on unirrigated land dried up completely.

In Madras the season opened with favourable conditions, and an increased area was sown; but the rain thereafter was deficient and the yield largely below the average.

1897-98

In Bengal the area was smaller than the average, the contraction being due to insufficient rain at sowing time. The crop suffered greatly from the absence of seasonable rain in Bihar and north Bengal and from excessive rain in south Bengal.

In the North-Western Provinces and Oudh the season was not favourable; the growth of the plants was interfered with early in the season by excessive heat and insufficient rain, and the heavy rain of July and August flooded the low lands and greatly injured the indigo growing on them. The area sown, however, was much in excess of the average, and the yield was estimated at 13 per cent above the average.

In the Panjab the crop is grown on irrigated lands only, and its condition was generally good, the yield being above the average.

In Madras the area sown was smaller than the average, the contraction being due not so much to the deficiency of seasonable rain as to the replacement of indigo by food crops. The yield was estimated to be 25 per cent smaller than the average.

1898-99

In Lower Bengal the season was generally unfavourable, but it was favourable in north Bihar where the yield was estimated to be equal to the average.

In the North-Western Provinces and Oudh the season was not favourable, and the area sown was much smaller than the average. The crop started well, but a large proportion was lost through insufficient irrigation and injury by insects, and further serious injury was done by continuous heavy rain, especially in the Benares division. The yield was estimated to be 26 per cent below the average.

In Madras and the Panjab also the season was on the whole unfavourable, but the contraction in the area sown was stated to be partly due to the low prices of 1897.

ESTIMATED AREA AND YIELD OF THE RICE CROP

Province	Area in acres	Yield in cwts	Province	Area in acres	Yield in cwts
Bengal			*Burma*		
1891-92	39,552,008	284,804,161	1891-92	4,215,023	(b)
1892-93	(a)37,324,907	333,956,225	1892-93	4,625,600	50,346,000
1893-94	37,886,500	374,227,800	1893-94	4,928,600	47,874,000
1894-95	38,639,500	416,857,200	1894-95	4,793,341	45,381,980
1895-96	37,447,600	317,514,600	1895-96	5,068,147	41,481,000
1896-97	36,177,400	179,637,400	1896-97	5,224,062	47,679,000
1897-98	39,549,500	398,142,000	1897-98	5,720,766	52,217,000
1898-99	39,879,200	427,355,800	1898-99	5,809,481	43,379,000
Madras			*Total*		
1891-92	5,771,000	30,000,200	1891-92	49,539,031	314,804,161
1892-93	6,403,200	35,980,400	1892-93	48,358,707	420,282,625
1893-94	6,710,200	37,017,600	1893-94	49,525,300	459,119,400
1894-95	6,569,400	35,662,600	1894-95	50,002,241	497,901,780
1895-96	6,881,000	56,359,500	1895-96	49,396,747	415,355,100
1896-97	6,620,000	48,359,700	1896-97	48,021,462	275,676,100
1897-98	6,935,200	47,991,700	1897-98	52,205,466	498,350,700
1898-99	6,952,700	55,203,600	1898-99	52,641,381	525,938,400

(a) Exclusive of Palámau.
(b) Not stated.

ESTIMATED AREA AND YIELD OF THE WHEAT CROP

Province	Area in acres	Yield in tons
Panjab		
1891-92	6,224,000	1,420,000
1892-93	7,020,000	2,213,000
1893-94	8,265,000	2,560,000
1894-95	8,051,800	2,395,353
1895-96	6,893,400	1,753,766
1896-97	6,584,300	1,872,066
1897-98	8,013,800	2,358,975
1898-99	7,729,200	1,977,777
North-Western Provinces and Oudh		
1891-92	4,692,000	1,579,000
1892-93	4,641,000	1,844,000
1893-94	4,827,000	1,473,000
1894-95	4,627,816	1,141,297
1895-96	3,896,406	1,236,486
1896-97	3,772,820	1,460,340
1897-98	4,537,351	1,773,488
1898-99	4,840,776	1,808,516
Central Provinces		
1891-92	3,904,000	760,000
1892-93	4,197,000	762,000
1893-94	3,936,000	575,000
1894-95	3,393,348	502,275
1895-96	2,714,454	368,038
1896-97	1,969,623	332,645
1897-98	2,171,714	543,095
1898-99	2,521,472	458,642

Province	Area in acres	Yield in tons
Bombay (including Native States)		
1891-92	2,176,000	426,000
1892-93	2,475,000	654,000
1893-94	2,525,000	762,000
1894-95	2,678,665	744,961
1895-96	2,288,838	454,865
1896-97	1,446,741	288,002
1897-98	2,004,832	627,914
1898-99	2,138,836	656,136
Berar		
1891-92	888,000	78,000
1892-93	985,000	76,000
1893-94	928,000	97,000
1894-95	889,326	81,882
1895-96	747,025	48,549
1896-97	381,425	11,841
1897-98	390,378	25,511
1898-99	436,362	21,892
Sind (including Native States)		
1891-92	483,000	117,000
1892-93	604,000	204,000
1893-94	531,000	161,000
1894-95	673,251	215,361
1895-96	315,559	71,683
1896-97	406,752	116,407
1897-98	591,621	177,160
1898-99	352,138	77,543

ESTIMATED AREA AND YIELD OF THE WHEAT CROP—*continued.*

Province	Area in acres	Yield in tons
Bengal		
1891-92	1,300,000	250,000
1892-93	1,559,000	466,000
1893-94	1,461,000	459,000
1894-95	1,413,000	686,300
1895-96	1,427,400	345,600
1896-97	1,341,700	386,900
1897-98	1,569,500	592,600
1898-99	1,594,600	666,800
Rajputana		
1891-92	1,471,000	362,000
1892-93	1,604,000	431,000
1893-94	1,646,000	389,000
1894-95	1,529,146	368,168
1895-96	1,306,868	315,573
1896-97	1,374,346	293,982
1897-98	1,302,233	307,062
1898-99	1,196,014	283,247
Central India		
1891-92	2,040,126	898,139
1892-93 (*a*)	1,639,485	278,340
1893-94 (*a*)	1,412,000	178,000
1894-95	2,543,104	826,945
1895-96	2,085,067	823,157
1896-97	1,396,229	337,389
1897-98	1,580,402	516,135
1898-99 (*a*)	1,277,630	241,672
Hyderabad		
1891-92	1,942,824	96,238
1892-93	1,260,272	97,062
1893-94	1,166,000	109,000
1894-95	1,527,445	74,034
1895-96	1,561,698	92,885
1896-97	852,643	23,010
1897-98	1,091,595	33,170
1898-99	1,196,520	37,225
Mysore		
1891-92	2,125	154
1892-93	2,640	189
1893-94	...	...
1894-95	4,534	304
1895-96	5,456	363
1896-97	3,871	413
1897-98	4,363	331
1898-99	4,029	492
Total		
1891-92	25,223,075	5,986,531
1892-93	25,987,397	7,025,591
1893-94	26,747,000	6,763,000
1894-95	27,331,435	6,836,880
1895-96	23,242,171	5,510,96[illegible]
1896-97	19,530,450	5,122,945
1897-98	23,257,789	6,955,441
1898-99	23,287,577	6,229,942

(*a*) Incomplete.

ESTIMATED AREA AND YIELD OF THE COTTON CROP

Province	Area in acres	Yield in bales of 400 lbs each
Bombay (including Native States)		
1891-92	5,136,000	683,000
1892-93	5,286,400	946,400
1893-94	5,910,900	927,100
1894-95	5,292,717	782,497
1895-96	5,303,598	915,575
1896-97	5,033,549	723,587
1897-98	4,751,103	834,004
1898-99	4,814,213	1,056,481
Berar		
1891-92	2,244,000	302,000
1892-93	2,186,600	186,800
1893-94	2,184,800	162,500
1894-95	2,102,956	116,289
1895-96	2,071,856	235,268
1896-97	2,306,870	137,823
1897-98	2,150,329	185,965
1898-99	2,476,306	177,542
Madras		
1891-92	1,243,000	80,000
1892-93	1,326,200	103,600
1893-94	1,724,000	121,200
1894-95	1,521,500	106,980
1895-96	1,623,900	120,524
1896-97	1,395,400	104,655
1897-98	1,509,100	118,876
1898-99	1,295,000	124,735
Hyderabad		
1892-93	1,719,573	306,194
1893-94	1,593,113	321,591
1894-95	1,456,283	229,085
1895-96	1,607,792	326,879
1896-97	1,558,296	86,292
1897-98	1,653,669	97,586
1898-99	1,738,379	132,701
North-Western Provinces and Oudh		
1891-92	1,250,000	118,000
1892-93	1,045,100	118,000
1893-94	1,311,500	179,700
1894-95	1,492,084	141,506
1895-96	1,312,673	200,821
1896-97	1,423,924	182,127
1897-98	1,140,206	168,898
1898-99	1,130,322	189,668
Panjab		
1891-92	498,000	112,000
1892-93	549,900	118,200
1893-94	948,300	200,900
1894-95	1,124,500	231,997
1895-96	1,161,200	241,667
1896-97	1,176,700	204,806
1897-98	1,128,400	223,947
1898-99	788,600	166,707

ESTIMATED AREA AND YIELD OF THE COTTON CROP—*continued.*

Province	Area in acres	Yield in bales of 400 lbs each
Central Provinces		
1891-92	738,000	52,000
1892-93	652,200	85,900
1893-94	690,700	79,600
1894-95	601,984	81,196
1895-96	541,087	105,940
1896-97 (a)	718,186	86,950
1897-98	668,847	118,994
1898-99	673,529	113,072
Rajputana		
1891-92	517,000	117,000
1892-93	500,400	133,300
1893-94 (b)	617,600	171,700
1894-95	619,362	184,696
1895-96	514,854	150,862
1896-97	549,286	145,492
1897-98	542,435	137,669
1898-99	478,604	117,743
Central India		
1893-94 (c)	295,300	95,800
1894-95	512,936	114,060
1895-96	420,239	148,640
1896-97	522,683	137,840
1897-98	417,456	181,864
1898-99	455,344	236,840
Bengal		
1892-93	231,800	31,300
1893-94	216,000	30,400
1894-95	203,700	33,489
1895-96	197,900	28,009
1896-97	157,100	20,164
1897-98	174,000	29,890
1898-99	168,200	26,731
Sind (including Native States)		
1891-92	104,000	33,000
1892-93	69,800	32,400
1893-94	115,800	64,400
1894-95	113,589	47,264
1895-96	111,855	43,730
1896-97	123,706	48,595
1897-98	108,227	34,437
1898-99	100,020	(d)19,334
Total		
1891-92	11,730,000	1,497,000
1892-93	13,567,973	2,062,094
1893-94	15,608,013	2,354,891
1894-95	15,041,611	2,069,059
1895-96	14,866,954	2,517,915
1896-97	14,965,650	1,878,331
1897-98	14,243,772	2,132,070
1898-99	14,118,517	2,361,554

(a) Exclusive of the zamindári area in Raipur, Biláspur, and Sambalpur.
(b) Exclusive of Tonk.
(c) Exclusive of the main portion of the Bhopal Agency.
(d) Incomplete.

ESTIMATED AREA AND YIELD OF THE LINSEED CROP

Province		Area in acres	Yield in tons
North-Western Provinces and Oudh			
1891-92	Pure (a)	622,000	110,000
	Mixed (a)	4,044,000	97,000
1892-93	Pure	481,000	74,000
	Mixed	4,009,000	94,000
1893-94	Pure	742,000	101,000
	Mixed	4,008,000	65,000
1894-95	Pure	753,857	69,165
	Mixed	4,169,434	53,899
1895-96	Pure	403,565	55,796
	Mixed	3,927,944	82,462
1896-97	Pure	235,166	40,036
	Mixed	2,898,145	58,504
1897-98	Pure	519,461	110,619
	Mixed	3,434,500	90,976
1898-99	Pure	431,988	87,854
	Mixed	3,639,912	91,284
Central Provinces			
1891-92		1,388,000	112,000
1892-93		1,384,000	134,000
1893-94		1,788,000	132,000
1894-95		1,498,672	42,532
1895-96		730,750	45,253
1896-97		527,421	19,391
1897-98		683,728	69,783
1898-99		830,783	58,393
Bengal			
1892-93		805,700	121,900
1893-94		777,100	131,800
1894-95		732,900	120,900
1895-96		712,700	95,600
1896-97		587,800	84,900
1897-98		662,800	125,400
1898-99		684,300	143,000
Hyderabad			
1896-97		324,455	11,355
1897-98		438,030	15,141
1898-99		426,045	14,622
Berar			
1891-92		364,000	35,000
1892-93		354,000	21,000
1893-94		578,000	29,000
1894-95		385,563	13,893
1895-96		500,650	27,497
1896-97		188,142	4,576
1897-98		180,472	10,405
1898-99		171,085	7,683
Bombay (including Native States)			
1891-92		270,000	19,000
1892-93		233,000	25,000
1893-94		402,000	52,000
1894-95		410,692	25,308
1895-96		606,428	63,261
1896-97		157,763	2,221
1897-98		223,396	23,646
1898-99		213,994	18,047
Rest of India			
1891-92		567,000	114,000
1892-93		567,000	114,000
1893-94		567,000	114,000
Total			
1891-92		7,255,000	487,000
1892-93		7,833,700	583,900
1893-94		8,862,100	624,800
1894-95		7,951,118	325,697
1895-96		6,882,037	369,869
1896-97		4,918,892	220,983
1897-98		6,142,387	445,970
1898-99		6,398,107	420,883

(a) "Pure" means linseed sown by itself; "mixed" means linseed sown in the same fields with other crops.

ESTIMATED AREA AND YIELD OF THE RAPE AND MUSTARD CROP

Province		Area in acres	Yield in tons
North-Western Provinces and Oudh			
1891-92	Pure (a)	132,000	32,000
	Mixed (a)	9,083,000	360,000
1892-93	Pure	126,000	27,000
	Mixed	8,588,000	367,000
1893-94	Pure	131,000	21,000
	Mixed	8,909,000	240,000
1894-95	Pure	109,347	16,497
	Mixed	9,109,152	216,050
1895-96	Pure	95,678	26,554
	Mixed	7,487,563	359,979
1896-97	Pure	83,372	18,524
	Mixed	7,084,519	340,602
1897-98	Pure	88,822	28,417
	Mixed	8,379,863	436,451
1898-99	Pure	84,152	22,884
	Mixed	8,548,444	410,983
Bengal			
1892-93		2,256,000	372,300
1893-94		2,209,100	334,200
1894-95		2,221,600	343,700
1895-96		2,148,400	332,400
1896-97		2,003,900	312,300
1897-98		2,239,700	438,600
1898-99		2,222,500	449,800
Hyderabad			
1896-97		1,994	73
1897-98		3,828	140
1898-99		8,796	340
Panjab			
1891-92		594,000	68,000
1892-93		850,000	135,000
1893-94		900,000	112,000
1894-95		802,600	97,224
1895-96		475,100	50,602
1896-97		515,300	52,756
1897-98		1,112,300	142,115
1898-99		582,600	56,041

Province	Area in acres	Yield in tons
Sind (including Native States)		
1891-92	169,000	22,000
1892-93	140,000	20,000
1893-94	111,000	17,000
1894-95	222,413	24,852
1895-96	53,664	8,503
1896-97	72,093	11,101
1897-98	154,248	27,277
1898-99	68,914	8,251
Assam		
1891-92	168,000	36,000
1892-93	170,000	45,000
1893-94	168,000	34,000
1894-95	134,399	20,249
1895-96	182,640	36,388
1896-97	178,408	38,853
1897-98	167,268	31,878
1898-99	134,856	21,891
Bombay (including Native States)		
1891-92	44,000	7,000
1892-93	65,000	13,000
1893-94	89,000	18,000
1894-95	91,822	18,509
1895-96	49,431	7,617
1896-97	55,615	8,207
1897-98	56,830	14,380
1898-99	52,679	9,718
Rest of India		
1891-92	68,000	10,000
1892-93	68,000	10,000
1893-94	68,000	10,000
Total		
1891-92	14,396,000	1,046,000
1892-93	12,263,000	989,300
1893-94	12,585,100	786,200
1894-95	12,691,333	737,081
1895-96	10,492,476	822,043
1896-97	19,895,201	782,416
1897-98	12,202,859	1,119,258
1898-99	11,702,741	979,908

(a) "Pure" means seed sown by itself; "mixed" means seed sown in the same fields with other crops.

ESTIMATED AREA AND YIELD OF THE SESAMUM CROP

Province	Area in acres	Yield in tons
Madras		
1891-92	501,000	(a) 4,900
1892-93	318,600	(a) 5,522
1893-94	296,300	(a) 5,290
1894-95	613,600	16,739
1895-96	824,700	22,507
1896-97	562,800	14,830
1897-98	826,000	24,100
1898-99	754,000	28,300
Bombay (including Native States)		
1891-92	590,000	79,000
1892-93	703,500	105,500
1893-94	668,600	78,900
1894-95	754,072	100,438
1895-96	843,039	98,104
1896-97	770,553	65,600
1897-98	681,905	103,136
1898-99	709,120	107,410
Central Provinces		
1891-92	456,000	17,000
1892-93	503,000	33,000
1893-94	534,700	31,300
1894-95	520,099	27,714
1895-96	569,407	45,243
1896-97	627,948	43,953
1897-98	749,491	67,770
1898-99	637,928	47,330
Bengal		
1894-95	356,200	43,365
1895-96	368,900	35,930
1896-97	332,500	30,765
1897-98	367,500	49,800
1898-99	371,000	53,200
Panjab		
1891-92	122,000	15,000
1892-93	204,500	25,900
1893-94	234,800	25,900
1894-95	319,200	31,917
1895-96	189,400	18,772
1896-97	223,400	21,379
1897-98	195,400	22,984
1898-99	252,600	25,350

Province	Area in acres	Yield in tons
North-Western Provinces and Oudh		
1891-92	142,000	8,000
1892-93	152,600	14,700
1893-94	200,600	19,700
1894-95	177,043	15,513
1895-96	148,833	14,554
1896-97	177,785	12,222
1897-98	147,817	14,994
1898-99	150,783	15,159
Sind (including Native States)		
1891-92	103,000	(a) 7,800
1892-93	109,500	10,516
1893-94	177,740	12,309
1894-95	191,040	15,892
1895-96	151,038	12,052
1896-97	183,873	12,384
1897-98	154,812	8,260
1898-99	108,824	7 943
Berar		
1891-92	123,000	6,300
1892-93	115,100	4,000
1893-94	85,300	3,200
1894-95	69,715	2,359
1895-96	76,155	2,704
1896-97	103,298	3,515
1897-98	135,164	6,573
1898-99	135,483	5,620
Hyderabad		
1896-97	387,041	13,005
1897-98	404,020	13,200
1898-99	426,740	14,738
Total		
1891-92	2,037,000	138,000
1892-93	2,106,800	199,138
1893-94	2,198,040	176,599
1894-95	3,000,969	253,937
1895-96	3,171,472	249,866
1896-97	3,369 198	217,653
1897-98	3,662,109	310,817
1898-99	3,546,478	305,050

(a) Incomplete.

ESTIMATED AREA AND YIELD OF THE JUTE AND INDIGO CROPS

Province	Area in acres	Yield in bales of 400 lbs		Area in acres	Yield in bales of 400 lbs
JUTE					
Bengal					
1891-92	1,403,445	(a)2,971,794	1895-96	2,242,700	6,425,900
1892-93	2,135,142	5,717,444	1896-97	2,196,600	5,032,000
1893-94	2,222,600	5,001,700	1897-98	2,151,600	6,189,200
1894-95	2,264,300	6,144,300	1898-99	1,624,400	4,153,800

Province	Area in acres	Yield in cwts	Province	Area in acres	Yield in cwts
INDIGO					
Madras			*Panjab*		
1891-92	166,130	18,540	1891-92	52,200	9,256
1892-93	301,000	50,420	1892-93	65,300	10,085
1893-94	442,400	58,100	1893-94	110,700	15,946
1894-95	514,500	67,480	1894-95	124,200	24,005
1895-96	414,900	63,680	1895-96	104,300	20,325
1896-97	454,700	50,740	1896-97	135,400	20,549
1897-98	323,900	61,460	1897-98	108,800	17,392
1898-99	187,000	30,940	1898-99	47,200	8,263
North-Western Provinces and Oudh			*Bengal*		
1891-92	201,269	20,533	1892-93	645,950	92,008
1892-93	206,516	26,545	1893-94	648,928	67,285
1893-94	349,980	38,106	1894-95	629,100	104,485
1894-95	420,242	41,524	1895-96	552,700	73,133
1895-96	342,102	33,786	1896-97	582,200	56,671
1896-97	436,601	40,713	1897-98	529,500	50,415
1897-98	376,899	37,545	1898-99	508,600	72,751
1898-99	235,519	26,416	*Total*		
			1891-92	419,599	148,329
			1892-93	1,218,766	179,056
			1893-94	1,552,008	179,437
			1894-95	1,688,042	237,494
			1895-96	1,414,602	190,924
			1896-97	1,608,901	168,673
			1897-98	1,389,099	166,812
			1898-99	978,319	138,370

(a) Approximate

G. I. C. P. Ofs—No. 517 F. & C. D.—13-12-99.—250.—B. N. D.